AECOM Environment

Fourth Quarter 2021 – October, November, December Operation, Maintenance, and Monitoring Report

CHEM-TROL Site
NYSDEC Site No. 9-15-015
Report.hw915015.2022-03-09.4Q2021OMM

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:
Waste Management
100 Brandywine Boulevard, Suite 300
Newtown, PA 18940

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

March 9, 2022

AECOM Project No. 60652207.3

AECOM
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Suite 210
Amherst, NY 14228

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March 9, 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
Fourth Quarter 2021 Operation, Maintenance, and Monitoring Report
Chem-Trol Site, NYSDEC Site No. 9-15-015, Report.hw915015.2022-03-09.4Q2021OMM

Dear Mr. May:

Enclosed please find the Fourth Quarter 2021 (4Q21 – October, November, December) Operation, Maintenance, and Monitoring Report for the "Chem-Trol" project site. AECOM is submitting this quarterly monitoring report on behalf of our client, S.C. Holdings, Inc.

The enclosed report contains the following information for 4Q21:

- 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 4Q21 is as follows:

October 2021

On October 11, 2021, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

AECOM collected the monthly monitoring samples on October 21, 2021; analytical data were received on November 2, 2021. As presented on Table 1 (October 21, 2021), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

November 2021

AECOM collected the monthly monitoring samples on November 19, 2021; analytical data were received on November 29, 2021. As presented on Table 1 (November 19, 2021), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

December 2021

On December 1, 2021, AECOM performed pressure washing and mechanical cleaning of the air stripper trays.

AECOM collected the monthly monitoring samples on December 2, 2021; analytical data were received on December 13, 2021. As presented on Table 1 (December 2, 2021), there were no exceedances of the treatment or discharge requirements for any parameter in the effluent samples during this month.

On December 9, 2021, AECOM collected the 4Q21 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: Mr. Chad Moose (Waste Management) (electronic copy)
Ryan Donovan, (Waste Management) (electronic copy)
60652207 Project File

October 2021

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: Mostly cloudy, 59 F
Date: 10/21/2021 Arrival Time: 8:45 Departure Time: 12:45

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	Breaker was on; however, the heater was 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**	
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	193 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	175 Inches
Flow Meter Reading	28,528,522 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	193 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	16.5 Inches H2O

Effluent Flow

Total System Meter Reading	72,526,092 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 initially 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 (3Q2021) was collected on 9/20/21.

With the replacement of the former HDPE shallow tray air stripper with a QED EZ-Tray stainless steel air stripper unit, acid washes will no longer be necessary. The trays in the new unit are removable and mechanical cleaning methods will be utilized for cleaning (pressure washer). The air stripper trays were mechanically cleaned on 10/11/2021.

The monthly samples were collected today, 10/21/21, by AECOM.

Table 1
October 21, 2021 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*	1,742	1,742	144,000	gpd	NA	NA	NA
pH	7.0	7.9	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 36	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 38	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 46	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 48	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 31	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 70	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 47	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 68	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 48	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	3,000	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,090	449	3,000	ug/L	0.01	3.61	lbs/day
TSS	4.4	5.2	20	mg/L	0.08		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 September 16, 2021 through October 21, 2021.*

Table 2
October 21, 2021 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 10/21/2021	units	Prior Report 9/16/2021
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	193	Inches	289
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	175	Inches	182
Flow Meter Reading	28,528,522	gallons	28,528,522
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	193	Inches	202
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	16.5	inches H_2O	>20
Effluent Flow			
Total System Meter Reading	72,526,092	gallons	72,465,127
Average System Flow Since Prior Report	1,742	gpd	
	72.6	gph	
	1.2	gpm	
Influent o-Chlorotoluene concentration	3,000	ug/L	
Current month mass removal	0.7	kilograms	

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 480-191263-1
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:
11/2/2021 2:58:00 PM
Joshua Velez, Project Management Assistant I
joshua.velez@eurofinset.com

Designee for

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

Table of Contents

Definitions/Glossary

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

Job ID: 480-191263-1

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

Job ID: 480-191263-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-191263-1

Comments
No additional comments.

Receipt
The samples were received on 10/21/2021 2:35 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 3.5º C.

GC/MS VOA
Method 624.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: Influent (480-191263-2), (480-191263-C-2 MS) and (480-191263-C-2 MSD). 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
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 (480-191263-1) and Influent (480-191263-2).

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: 480-191263-1

Client Sample ID: Effluent — Lab Sample ID: 480-191263-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	449		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	5.2		4.0		mg/L	1		SM 2540D	Total/NA
pH	7.9	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.5	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-191263-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	3000		26		ug/L	80		624.1	Total/NA
Iron	1090		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
Total Suspended Solids	4.4		4.0		mg/L	1		SM 2540D	Total/NA
pH	7.2	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	17.9	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-191263-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 480-191263-1

Client Sample ID: Effluent

Date Collected: 10/21/21 09:30
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-1

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			10/22/21 19:19	1
1,1-Dichloroethane	ND		5.0		ug/L			10/22/21 19:19	1
1,1-Dichloroethene	ND		5.0		ug/L			10/22/21 19:19	1
Benzene	ND		5.0		ug/L			10/22/21 19:19	1
Chlorobenzene	ND		5.0		ug/L			10/22/21 19:19	1
Chloroethane	ND		5.0		ug/L			10/22/21 19:19	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/22/21 19:19	1
Toluene	ND		5.0		ug/L			10/22/21 19:19	1
Trichloroethene	ND		5.0		ug/L			10/22/21 19:19	1
o-Chlorotoluene	ND		5.0		ug/L			10/22/21 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*68 - 130*		*10/22/21 19:19*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*10/22/21 19:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*10/22/21 19:19*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*10/22/21 19:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**449**		50.0		ug/L		10/26/21 09:49	10/27/21 23:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**5.2**		4.0		mg/L			10/26/21 16:33	1
pH	**7.9**	**HF**	0.1		SU			10/28/21 20:36	1
Temperature	**17.5**	**HF**	0.001		Degrees C			10/28/21 20:36	1

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

Job ID: 480-191263-1

Client Sample ID: Influent

Date Collected: 10/21/21 10:00
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-2

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		31		ug/L			10/22/21 19:43	80
1,1-Dichloroethane	ND		47		ug/L			10/22/21 19:43	80
1,1-Dichloroethene	ND		68		ug/L			10/22/21 19:43	80
Benzene	ND		48		ug/L			10/22/21 19:43	80
Chlorobenzene	ND		38		ug/L			10/22/21 19:43	80
Chloroethane	ND		70		ug/L			10/22/21 19:43	80
cis-1,2-Dichloroethene	ND		46		ug/L			10/22/21 19:43	80
Toluene	ND		36		ug/L			10/22/21 19:43	80
Trichloroethene	ND		48		ug/L			10/22/21 19:43	80
o-Chlorotoluene	**3000**		26		ug/L			10/22/21 19:43	80

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*68 - 130*		*10/22/21 19:43*	*80*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*10/22/21 19:43*	*80*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*		*10/22/21 19:43*	*80*
Toluene-d8 (Surr)	*103*		*77 - 120*		*10/22/21 19:43*	*80*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1090**		50.0		ug/L		10/26/21 09:49	10/27/21 23:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**4.4**		4.0		mg/L			10/26/21 16:33	1
pH	**7.2**	**HF**	0.1		SU			10/28/21 20:37	1
Temperature	**17.9**	**HF**	0.001		Degrees C			10/28/21 20:37	1

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

Job ID: 480-191263-1

Client Sample ID: Trip Blank

Date Collected: 10/21/21 00:00
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-3

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			10/22/21 20:06	1
1,1-Dichloroethane	ND		5.0		ug/L			10/22/21 20:06	1
1,1-Dichloroethene	ND		5.0		ug/L			10/22/21 20:06	1
Benzene	ND		5.0		ug/L			10/22/21 20:06	1
Chlorobenzene	ND		5.0		ug/L			10/22/21 20:06	1
Chloroethane	ND		5.0		ug/L			10/22/21 20:06	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/22/21 20:06	1
Toluene	ND		5.0		ug/L			10/22/21 20:06	1
Trichloroethene	ND		5.0		ug/L			10/22/21 20:06	1
o-Chlorotoluene	ND		5.0		ug/L			10/22/21 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*68 - 130*		*10/22/21 20:06*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*10/22/21 20:06*	*1*
4-Bromofluorobenzene (Surr)	*101*		*76 - 123*		*10/22/21 20:06*	*1*
Toluene-d8 (Surr)	*104*		*77 - 120*		*10/22/21 20:06*	*1*

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

Lab Sample ID: MB 480-601676/7
Matrix: Water
Analysis Batch: 601676

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			10/22/21 18:05	1
1,1-Dichloroethane	ND		5.0		ug/L			10/22/21 18:05	1
1,1-Dichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
Benzene	ND		5.0		ug/L			10/22/21 18:05	1
Chlorobenzene	ND		5.0		ug/L			10/22/21 18:05	1
Chloroethane	ND		5.0		ug/L			10/22/21 18:05	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
Toluene	ND		5.0		ug/L			10/22/21 18:05	1
Trichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
o-Chlorotoluene	ND		5.0		ug/L			10/22/21 18:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*68 - 130*		*10/22/21 18:05*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*10/22/21 18:05*	*1*
4-Bromofluorobenzene (Surr)	*100*		*76 - 123*		*10/22/21 18:05*	*1*
Toluene-d8 (Surr)	*103*		*77 - 120*		*10/22/21 18:05*	*1*

Lab Sample ID: LCS 480-601676/5
Matrix: Water
Analysis Batch: 601676

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	21.1		ug/L		106	52 - 162
1,1-Dichloroethane	20.0	22.4		ug/L		112	59 - 155
1,1-Dichloroethene	20.0	22.6		ug/L		113	1 - 234
Benzene	20.0	22.3		ug/L		112	37 - 151
Chlorobenzene	20.0	21.5		ug/L		107	37 - 160
Chloroethane	20.0	21.9		ug/L		110	14 - 230
Toluene	20.0	21.8		ug/L		109	47 - 150
Trichloroethene	20.0	20.7		ug/L		104	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*68 - 130*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
4-Bromofluorobenzene (Surr)	*104*		*76 - 123*
Toluene-d8 (Surr)	*105*		*77 - 120*

Lab Sample ID: 480-191263-2 MS
Matrix: Water
Analysis Batch: 601676

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		1600	1640		ug/L		102	52 - 162
1,1-Dichloroethane	ND		1600	1840		ug/L		115	59 - 155
1,1-Dichloroethene	ND		1600	1810		ug/L		113	1 - 234
Benzene	ND		1600	1820		ug/L		114	37 - 151
Chlorobenzene	ND		1600	1710		ug/L		107	37 - 160
Chloroethane	ND		1600	2140		ug/L		133	14 - 230

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

Lab Sample ID: 480-191263-2 MS
Matrix: Water
Analysis Batch: 601676

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		1600	1740		ug/L		109	47 - 150
Trichloroethene	ND		1600	1640		ug/L		103	71 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*68 - 130*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*
Toluene-d8 (Surr)	*104*		*77 - 120*

Lab Sample ID: 480-191263-2 MSD
Matrix: Water
Analysis Batch: 601676

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		1600	1580		ug/L		99	52 - 162	3	15
1,1-Dichloroethane	ND		1600	1740		ug/L		109	59 - 155	6	15
1,1-Dichloroethene	ND		1600	1690		ug/L		105	1 - 234	7	15
Benzene	ND		1600	1700		ug/L		106	37 - 151	7	15
Chlorobenzene	ND		1600	1670		ug/L		104	37 - 160	2	15
Chloroethane	ND		1600	1950		ug/L		122	14 - 230	9	15
Toluene	ND		1600	1690		ug/L		106	47 - 150	3	15
Trichloroethene	ND		1600	1590		ug/L		99	71 - 157	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*
Toluene-d8 (Surr)	*104*		*77 - 120*

Lab Sample ID: MB 480-601678/7
Matrix: Water
Analysis Batch: 601678

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			10/22/21 18:05	1
1,1-Dichloroethane	ND		5.0		ug/L			10/22/21 18:05	1
1,1-Dichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
Benzene	ND		5.0		ug/L			10/22/21 18:05	1
Chlorobenzene	ND		5.0		ug/L			10/22/21 18:05	1
Chloroethane	ND		5.0		ug/L			10/22/21 18:05	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
Toluene	ND		5.0		ug/L			10/22/21 18:05	1
Trichloroethene	ND		5.0		ug/L			10/22/21 18:05	1
o-Chlorotoluene	ND		5.0		ug/L			10/22/21 18:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*68 - 130*		*10/22/21 18:05*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*10/22/21 18:05*	*1*

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

Lab Sample ID: MB 480-601678/7
Matrix: Water
Analysis Batch: 601678

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		76 - 123		10/22/21 18:05	1
Toluene-d8 (Surr)	103		77 - 120		10/22/21 18:05	1

Lab Sample ID: LCS 480-601678/5
Matrix: Water
Analysis Batch: 601678

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	21.1		ug/L		106	52 - 162		
1,1-Dichloroethane			20.0	22.4		ug/L		112	59 - 155		
1,1-Dichloroethene			20.0	22.6		ug/L		113	1 - 234		
Benzene			20.0	22.3		ug/L		112	37 - 151		
Chlorobenzene			20.0	21.5		ug/L		107	37 - 160		
Chloroethane			20.0	21.9		ug/L		110	14 - 230		
Toluene			20.0	21.8		ug/L		109	47 - 150		
Trichloroethene			20.0	20.7		ug/L		104	71 - 157		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		68 - 130
Dibromofluoromethane (Surr)	103		75 - 123
4-Bromofluorobenzene (Surr)	104		76 - 123
Toluene-d8 (Surr)	105		77 - 120

Lab Sample ID: 480-191263-2 MS
Matrix: Water
Analysis Batch: 601678

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		1600	1640		ug/L		102	52 - 162		
1,1-Dichloroethane	ND		1600	1840		ug/L		115	59 - 155		
1,1-Dichloroethene	ND		1600	1810		ug/L		113	1 - 234		
Benzene	ND		1600	1820		ug/L		114	37 - 151		
Chlorobenzene	ND		1600	1710		ug/L		107	37 - 160		
Chloroethane	ND		1600	2140		ug/L		133	14 - 230		
Toluene	ND		1600	1740		ug/L		109	47 - 150		
Trichloroethene	ND		1600	1640		ug/L		103	71 - 157		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		68 - 130
Dibromofluoromethane (Surr)	100		75 - 123
4-Bromofluorobenzene (Surr)	102		76 - 123
Toluene-d8 (Surr)	104		77 - 120

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

Lab Sample ID: 480-191263-2 MSD
Matrix: Water
Analysis Batch: 601678

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		1600	1580		ug/L		99	52 - 162	3	15
1,1-Dichloroethane	ND		1600	1740		ug/L		109	59 - 155	6	15
1,1-Dichloroethene	ND		1600	1690		ug/L		105	1 - 234	7	15
Benzene	ND		1600	1700		ug/L		106	37 - 151	7	15
Chlorobenzene	ND		1600	1670		ug/L		104	37 - 160	2	15
Chloroethane	ND		1600	1950		ug/L		122	14 - 230	9	15
Toluene	ND		1600	1690		ug/L		106	47 - 150	3	15
Trichloroethene	ND		1600	1590		ug/L		99	71 - 157	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*68 - 130*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
4-Bromofluorobenzene (Surr)	*102*		*76 - 123*
Toluene-d8 (Surr)	*104*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-601731/1-A
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		10/26/21 09:49	10/27/21 23:18	1

Lab Sample ID: LCS 480-601731/2-A
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10000	10330		ug/L		103	85 - 115		

Lab Sample ID: 480-191263-1 MS
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	449		10000	10580		ug/L		101	70 - 130		

Lab Sample ID: 480-191263-1 MSD
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	449		10000	10700		ug/L		103	70 - 130	1	20

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

Lab Sample ID: 480-191263-2 MS
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Influent
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1090		10000	11490		ug/L		104	70 - 130

Lab Sample ID: 480-191263-2 MSD
Matrix: Water
Analysis Batch: 602414

Client Sample ID: Influent
Prep Type: Total Recoverable
Prep Batch: 601731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	1090		10000	11350		ug/L		103	70 - 130	1	20

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

Lab Sample ID: MB 480-602098/1
Matrix: Water
Analysis Batch: 602098

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			10/26/21 16:33	1

Lab Sample ID: LCS 480-602098/2
Matrix: Water
Analysis Batch: 602098

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	2880	2867		mg/L		100	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-602566/1
Matrix: Water
Analysis Batch: 602566

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: 480-191263-1

GC/MS VOA

Analysis Batch: 601676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-601676/7	Method Blank	Total/NA	Water	624.1	
LCS 480-601676/5	Lab Control Sample	Total/NA	Water	624.1	
480-191263-2 MS	Influent	Total/NA	Water	624.1	
480-191263-2 MSD	Influent	Total/NA	Water	624.1	

Analysis Batch: 601678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-191263-1	Effluent	Total/NA	Water	624.1	
480-191263-2	Influent	Total/NA	Water	624.1	
480-191263-3	Trip Blank	Total/NA	Water	624.1	
MB 480-601678/7	Method Blank	Total/NA	Water	624.1	
LCS 480-601678/5	Lab Control Sample	Total/NA	Water	624.1	
480-191263-2 MS	Influent	Total/NA	Water	624.1	
480-191263-2 MSD	Influent	Total/NA	Water	624.1	

Metals

Prep Batch: 601731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-191263-1	Effluent	Total Recoverable	Water	200.7	
480-191263-2	Influent	Total Recoverable	Water	200.7	
MB 480-601731/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-601731/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-191263-1 MS	Effluent	Total Recoverable	Water	200.7	
480-191263-1 MSD	Effluent	Total Recoverable	Water	200.7	
480-191263-2 MS	Influent	Total Recoverable	Water	200.7	
480-191263-2 MSD	Influent	Total Recoverable	Water	200.7	

Analysis Batch: 602414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-191263-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	601731
480-191263-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	601731
MB 480-601731/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	601731
LCS 480-601731/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	601731
480-191263-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	601731
480-191263-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	601731
480-191263-2 MS	Influent	Total Recoverable	Water	200.7 Rev 4.4	601731
480-191263-2 MSD	Influent	Total Recoverable	Water	200.7 Rev 4.4	601731

General Chemistry

Analysis Batch: 602098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-191263-1	Effluent	Total/NA	Water	SM 2540D	
480-191263-2	Influent	Total/NA	Water	SM 2540D	
MB 480-602098/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-602098/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 602566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-191263-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-191263-2	Influent	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 602566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-602566/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 480-191263-1

Client Sample ID: Effluent
Date Collected: 10/21/21 09:30
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	601678	10/22/21 19:19	ATG	TAL BUF
Total Recoverable	Prep	200.7			601731	10/26/21 09:49	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	602414	10/27/21 23:25	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	602098	10/26/21 16:33	JGO	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	602566	10/28/21 20:36	KEB	TAL BUF

Client Sample ID: Influent
Date Collected: 10/21/21 10:00
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		80	601678	10/22/21 19:43	ATG	TAL BUF
Total Recoverable	Prep	200.7			601731	10/26/21 09:49	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	602414	10/27/21 23:44	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	602098	10/26/21 16:33	JGO	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	602566	10/28/21 20:37	KEB	TAL BUF

Client Sample ID: Trip Blank
Date Collected: 10/21/21 00:00
Date Received: 10/21/21 14:35

Lab Sample ID: 480-191263-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	601678	10/22/21 20:06	ATG	TAL BUF

Laboratory References:
TAL BUF = Eurofins TestAmerica, 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: 480-191263-1

Laboratory: Eurofins TestAmerica, 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	04-01-22

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: 480-191263-1

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 TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

Job ID: 480-191263-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-191263-1	Effluent	Water	10/21/21 09:30	10/21/21 14:35
480-191263-2	Influent	Water	10/21/21 10:00	10/21/21 14:35
480-191263-3	Trip Blank	Water	10/21/21 00:00	10/21/21 14:35

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: Sean P. Connelly	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-161930-28522.1
Client Contact: Chad Moose	Phone: (716)393-0870	E-Mail: Ryan.VanDette@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Waste Management	PWSID:	Analysis Requested		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 #: 10132351			
Email: cmoose@wm.com	WO #:			
Project Name: ChemTrol Site/NY22 Event Desc: ChemTrol Monthly Groundwat	Project #: 48002447			
Site: New York	SSOW#:			

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

480-191263 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	Containers
			Preservation Code:				D	A	N	N	
Effluent	10/21/21	0930	G	Water	N	N	1	3	1	1	
Influent	10/21/21	1000	G	Water	N	N	1	3	1	1	
Trip Blank	10/21/21	-	-	Water	N	N	1				

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]	10/21/21 1435	AECOM			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 10/21/21 1435	Company TA

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

November 2021

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: Cloudy, 36 F
Date: 11/19/2021 Arrival Time: 08:30 Departure Time: 09:50

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	297 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	192 Inches
Flow Meter Reading	28,528,522 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	215 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	21 Inches H2O

Effluent Flow

Total System Meter Reading	72,554,656 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 (3Q2021) was collected on September 9, 2021.

The air stripper trays were last mechanically cleaned on October 11, 2021.

The monthly samples were collected today, November 19, 2021, by AECOM.

Table 1
November 19, 2021 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*	1,020	1,020	144,000	gpd	NA	NA	NA
pH	7.4	8.0	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 36	< 5.0	5	ug/L	< 0.0000	0.006	lbs/day
Chlorobenzene	< 38	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
cis-1,2-Dichloroethene	< 46	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Benzene	< 48	< 5.0	5	ug/L	< 0.0000	0.006	lbs/day
1,1,1-Trichloroethane	< 31	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Chloroethane	< 70	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethane	< 47	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
1,1-Dichloroethene	< 68	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Trichloroethene	< 48	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
o-Chlorotoluene	3,000	< 5.0	10	ug/L	< 0.0000	0.012	lbs/day
Iron - Total	1,330	823	3,000	ug/L	0.01	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.03		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 October 21, 2021 through November 19, 2021.*

Table 2
November 19, 2021 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 11/19/2021	units	Prior Report 10/21/2021
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	297	Inches	193
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	192	Inches	175
Flow Meter Reading	28,528,522	gallons	28,528,522
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	215	Inches	193
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	21.0	inches H_2O	16.5
Effluent Flow			
Total System Meter Reading	72,554,656	gallons	72,526,092
Average System Flow Since Prior Report	1,020	gpd	
	42.5	gph	
	0.7	gpm	
Influent o-Chlorotoluene concentration	3,000	ug/L	
Current month mass removal	0.3	kilograms	

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 480-192709-1
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:
11/29/2021 5:09:58 PM

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

Table of Contents

Definitions/Glossary

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

Job ID: 480-192709-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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: 480-192709-1

Job ID: 480-192709-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-192709-1

Comments
No additional comments.

Receipt
The samples were received on 11/19/2021 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-192709-2). 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
No analytical or quality issues were noted, other than those described 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 (480-192709-1), Influent (480-192709-2) and (480-192709-C-1 DU).

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: 480-192709-1

Client Sample ID: Effluent — Lab Sample ID: 480-192709-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	823		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	8.0	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	22.2	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-192709-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	1700		26		ug/L	80		624.1	Total/NA
Iron	1330		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.4	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	22.4	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-192709-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 480-192709-1

Client Sample ID: Effluent

Date Collected: 11/19/21 09:00
Date Received: 11/19/21 10:05

Lab Sample ID: 480-192709-1

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			11/22/21 13:47	1
1,1-Dichloroethane	ND		5.0		ug/L			11/22/21 13:47	1
1,1-Dichloroethene	ND		5.0		ug/L			11/22/21 13:47	1
Benzene	ND		5.0		ug/L			11/22/21 13:47	1
Chlorobenzene	ND		5.0		ug/L			11/22/21 13:47	1
Chloroethane	ND		5.0		ug/L			11/22/21 13:47	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/22/21 13:47	1
Toluene	ND		5.0		ug/L			11/22/21 13:47	1
Trichloroethene	ND		5.0		ug/L			11/22/21 13:47	1
o-Chlorotoluene	ND		5.0		ug/L			11/22/21 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*68 - 130*		*11/22/21 13:47*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*11/22/21 13:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*11/22/21 13:47*	*1*
Toluene-d8 (Surr)	*102*		*77 - 120*		*11/22/21 13:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**823**		50.0		ug/L		11/24/21 09:53	11/24/21 23:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			11/24/21 13:14	1
pH	**8.0**	**HF**	0.1		SU			11/23/21 14:34	1
Temperature	**22.2**	**HF**	0.001		Degrees C			11/23/21 14:34	1

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

Job ID: 480-192709-1

Client Sample ID: Influent

Date Collected: 11/19/21 09:20
Date Received: 11/19/21 10:05

Lab Sample ID: 480-192709-2

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		31		ug/L			11/22/21 14:10	80
1,1-Dichloroethane	ND		47		ug/L			11/22/21 14:10	80
1,1-Dichloroethene	ND		68		ug/L			11/22/21 14:10	80
Benzene	ND		48		ug/L			11/22/21 14:10	80
Chlorobenzene	ND		38		ug/L			11/22/21 14:10	80
Chloroethane	ND		70		ug/L			11/22/21 14:10	80
cis-1,2-Dichloroethene	ND		46		ug/L			11/22/21 14:10	80
Toluene	ND		36		ug/L			11/22/21 14:10	80
Trichloroethene	ND		48		ug/L			11/22/21 14:10	80
o-Chlorotoluene	**1700**		26		ug/L			11/22/21 14:10	80

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*68 - 130*		*11/22/21 14:10*	*80*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*11/22/21 14:10*	*80*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*11/22/21 14:10*	*80*
Toluene-d8 (Surr)	*98*		*77 - 120*		*11/22/21 14:10*	*80*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1330**		50.0		ug/L		11/24/21 09:53	11/24/21 23:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			11/24/21 13:14	1
pH	**7.4**	**HF**	0.1		SU			11/23/21 14:37	1
Temperature	**22.4**	**HF**	0.001		Degrees C			11/23/21 14:37	1

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

Job ID: 480-192709-1

Client Sample ID: Trip Blank
Date Collected: 11/19/21 00:00
Date Received: 11/19/21 10:05

Lab Sample ID: 480-192709-3
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			11/22/21 14:33	1
1,1-Dichloroethane	ND		5.0		ug/L			11/22/21 14:33	1
1,1-Dichloroethene	ND		5.0		ug/L			11/22/21 14:33	1
Benzene	ND		5.0		ug/L			11/22/21 14:33	1
Chlorobenzene	ND		5.0		ug/L			11/22/21 14:33	1
Chloroethane	ND		5.0		ug/L			11/22/21 14:33	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/22/21 14:33	1
Toluene	ND		5.0		ug/L			11/22/21 14:33	1
Trichloroethene	ND		5.0		ug/L			11/22/21 14:33	1
o-Chlorotoluene	ND		5.0		ug/L			11/22/21 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*68 - 130*		*11/22/21 14:33*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*11/22/21 14:33*	*1*
4-Bromofluorobenzene (Surr)	*97*		*76 - 123*		*11/22/21 14:33*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*11/22/21 14:33*	*1*

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

Lab Sample ID: MB 480-606023/8
Matrix: Water
Analysis Batch: 606023

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			11/22/21 13:01	1
1,1-Dichloroethane	ND		5.0		ug/L			11/22/21 13:01	1
1,1-Dichloroethene	ND		5.0		ug/L			11/22/21 13:01	1
Benzene	ND		5.0		ug/L			11/22/21 13:01	1
Chlorobenzene	ND		5.0		ug/L			11/22/21 13:01	1
Chloroethane	ND		5.0		ug/L			11/22/21 13:01	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			11/22/21 13:01	1
Toluene	ND		5.0		ug/L			11/22/21 13:01	1
Trichloroethene	ND		5.0		ug/L			11/22/21 13:01	1
o-Chlorotoluene	ND		5.0		ug/L			11/22/21 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*68 - 130*		*11/22/21 13:01*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*11/22/21 13:01*	*1*
4-Bromofluorobenzene (Surr)	*98*		*76 - 123*		*11/22/21 13:01*	*1*
Toluene-d8 (Surr)	*100*		*77 - 120*		*11/22/21 13:01*	*1*

Lab Sample ID: LCS 480-606023/6
Matrix: Water
Analysis Batch: 606023

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	21.5		ug/L		107	52 - 162
1,1-Dichloroethane	20.0	20.7		ug/L		103	59 - 155
1,1-Dichloroethene	20.0	22.1		ug/L		110	1 - 234
Benzene	20.0	22.0		ug/L		110	37 - 151
Chlorobenzene	20.0	21.6		ug/L		108	37 - 160
Chloroethane	20.0	15.7		ug/L		78	14 - 230
Toluene	20.0	21.8		ug/L		109	47 - 150
Trichloroethene	20.0	21.0		ug/L		105	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*68 - 130*
Dibromofluoromethane (Surr)	*97*		*75 - 123*
4-Bromofluorobenzene (Surr)	*99*		*76 - 123*
Toluene-d8 (Surr)	*99*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-606370/1-A
Matrix: Water
Analysis Batch: 606632

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 606370

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		11/24/21 09:53	11/24/21 21:26	1

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

Lab Sample ID: LCS 480-606370/2-A
Matrix: Water
Analysis Batch: 606632

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 606370

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10000	10130		ug/L		101	85 - 115		

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

Lab Sample ID: MB 480-606522/1
Matrix: Water
Analysis Batch: 606522

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			11/24/21 13:14	1

Lab Sample ID: LCS 480-606522/2
Matrix: Water
Analysis Batch: 606522

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			331	327.2		mg/L		99	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-606321/23
Matrix: Water
Analysis Batch: 606321

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		

Lab Sample ID: 480-192709-1 DU
Matrix: Water
Analysis Batch: 606321

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.0	HF		7.9		SU				1	5
Temperature	22.2	HF		22.5		Degrees C				1	10

QC Association Summary

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

Job ID: 480-192709-1

GC/MS VOA

Analysis Batch: 606023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192709-1	Effluent	Total/NA	Water	624.1	
480-192709-2	Influent	Total/NA	Water	624.1	
480-192709-3	Trip Blank	Total/NA	Water	624.1	
MB 480-606023/8	Method Blank	Total/NA	Water	624.1	
LCS 480-606023/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 606370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192709-1	Effluent	Total Recoverable	Water	200.7	
480-192709-2	Influent	Total Recoverable	Water	200.7	
MB 480-606370/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-606370/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 606632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192709-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	606370
480-192709-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	606370
MB 480-606370/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	606370
LCS 480-606370/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	606370

General Chemistry

Analysis Batch: 606321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192709-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-192709-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-606321/23	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
480-192709-1 DU	Effluent	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 606522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192709-1	Effluent	Total/NA	Water	SM 2540D	
480-192709-2	Influent	Total/NA	Water	SM 2540D	
MB 480-606522/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-606522/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Lab Chronicle

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

Job ID: 480-192709-1

Client Sample ID: Effluent

Lab Sample ID: 480-192709-1

Date Collected: 11/19/21 09:00
Matrix: Water
Date Received: 11/19/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	606023	11/22/21 13:47	ATG	TAL BUF
Total Recoverable	Prep	200.7			606370	11/24/21 09:53	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	606632	11/24/21 23:00	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	606522	11/24/21 13:14	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	606321	11/23/21 14:34	DLG	TAL BUF

Client Sample ID: Influent

Lab Sample ID: 480-192709-2

Date Collected: 11/19/21 09:20
Matrix: Water
Date Received: 11/19/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		80	606023	11/22/21 14:10	ATG	TAL BUF
Total Recoverable	Prep	200.7			606370	11/24/21 09:53	ADM	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	606632	11/24/21 23:03	AMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	606522	11/24/21 13:14	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	606321	11/23/21 14:37	DLG	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-192709-3

Date Collected: 11/19/21 00:00
Matrix: Water
Date Received: 11/19/21 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	606023	11/22/21 14:33	ATG	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, 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: 480-192709-1

Laboratory: Eurofins TestAmerica, 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	04-01-22

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: 480-192709-1

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 TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

Job ID: 480-192709-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-192709-1	Effluent	Water	11/19/21 09:00	11/19/21 10:05
480-192709-2	Influent	Water	11/19/21 09:20	11/19/21 10:05
480-192709-3	Trip Blank	Water	11/19/21 00:00	11/19/21 10:05

Eurofins TestAmerica, 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: Sean P. Connelly	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-166256-28522.1
Client Contact: Chad Moose	Phone: (716) 393-0870	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 #: 10132351			
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, 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, 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	11/19/21	0900	G	Water	N	N	1	3	1	1		
Influent	11/19/21	0920	G	Water	N	N	1	3	1	1		
Trip Blank	11/19/21	--		Water	N	N		1				

480-192709 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
Sean P. Connelly	11/19/21 @ 1005	Accony			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/19/21 1005	Company TAD

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

Cooler Temperature(s) °C and Other Remarks: 2.7 ICE

Ver: 06/08/2021

December 2021

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, 40 F
Date: 12/2/2021 Arrival Time: 11:00 Departure Time: 12:00

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	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**	Discharge flowing in batches every 10-15 minutes
Cleanout	**X**	

Instrumentation/Readings:

EW-1

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	292 Inches
Flow Meter Reading	Not Working Gallons

EW-2

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	184 Inches
Flow Meter Reading	28,528,920 Gallons

EW-3

Pumping Rate	0 GPM (see Notes section)
Water Level Above Transducer	200 Inches
Flow Meter Reading	15,696,383 Gallons

Air Stripper

Stripper Blower Pressure	14 Inches H2O

Effluent Flow

Total System Meter Reading	72,578,625 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 air stripper trays were last mechanically cleaned on December 1, 2021.

The monthly samples were collected today, December 2, 2021, by AECOM.

The most recent round of water levels (4Q2021) was collected on December 9, 2021.

Table 1
December 2, 2021 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*	1,844	1,844	144,000	gpd	NA	NA	NA
pH	7.4	7.8	6.5 to 8.5	standard units	NA	NA	NA
Toluene	< 36	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
Chlorobenzene	< 38	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
cis-1,2-Dichloroethene	< 46	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Benzene	< 48	< 5.0	5	ug/L	< 0.0001	0.006	lbs/day
1,1,1-Trichloroethane	< 31	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Chloroethane	< 70	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethane	< 47	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
1,1-Dichloroethene	< 68	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Trichloroethene	< 48	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
o-Chlorotoluene	2,100	< 5.0	10	ug/L	< 0.0001	0.012	lbs/day
Iron - Total	1,320	916	3,000	ug/L	0.01	3.61	lbs/day
TSS	< 4.0	< 4.0	20	mg/L	< 0.06		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 November 19, 2021 through December 2, 2021.*

Table 2
December 2, 2021 Summary of Influent and Effluent Data

Chem-Trol Site
Town of Hamburg, New York

Instrumentation/Readings:	Current Report 12/2/2021	units	Prior Report 11/19/2021
EW-1			
Pumping Rate	0	GPM	0
Water Level Above Transducer	292	Inches	297
Flow Meter Reading	NW	gallons	NW
EW-2			
Pumping Rate	0	GPM	0
Water Level Above Transducer	184	Inches	192
Flow Meter Reading	28,528,920	gallons	28,528,522
EW-3			
Pumping Rate	0	GPM	0
Water Level Above Transducer	215	Inches	215
Flow Meter Reading	15,696,383	gallons	15,696,383
Air Stripper			
Stripper Blower Pressure	14.0	inches H_2O	21.0
Effluent Flow			
Total System Meter Reading	72,578,625	gallons	72,554,656
Average System Flow Since Prior Report	1,844	gpd	
	76.8	gph	
	1.3	gpm	
Influent o-Chlorotoluene concentration	2,100	ug/L	
Current month mass removal	0.2	kilograms	

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 480-192968-1
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:
12/13/2021 4:11:27 PM

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

Table of Contents

Definitions/Glossary

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

Job ID: 480-192968-1

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

Job ID: 480-192968-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-192968-1

Comments
No additional comments.

Receipt
The samples were received on 12/2/2021 12:35 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 2.4º C.

GC/MS VOA
Method 624.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: Influent (480-192968-2). 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
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 (480-192968-1) and Influent (480-192968-2).

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: 480-192968-1

Client Sample ID: Effluent — Lab Sample ID: 480-192968-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	916		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.8	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	21.7	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Influent — Lab Sample ID: 480-192968-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Chlorotoluene	2100		26		ug/L	80		624.1	Total/NA
Iron	1320		50.0		ug/L	1		200.7 Rev 4.4	Total Recoverable
pH	7.1	HF	0.1		SU	1		SM 4500 H+ B	Total/NA
Temperature	21.8	HF	0.001		Degrees C	1		SM 4500 H+ B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 480-192968-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 480-192968-1

Client Sample ID: Effluent

Date Collected: 12/02/21 11:30
Date Received: 12/02/21 12:35

Lab Sample ID: 480-192968-1

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			12/03/21 18:28	1
1,1-Dichloroethane	ND		5.0		ug/L			12/03/21 18:28	1
1,1-Dichloroethene	ND		5.0		ug/L			12/03/21 18:28	1
Benzene	ND		5.0		ug/L			12/03/21 18:28	1
Chlorobenzene	ND		5.0		ug/L			12/03/21 18:28	1
Chloroethane	ND		5.0		ug/L			12/03/21 18:28	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			12/03/21 18:28	1
Toluene	ND		5.0		ug/L			12/03/21 18:28	1
Trichloroethene	ND		5.0		ug/L			12/03/21 18:28	1
o-Chlorotoluene	ND		5.0		ug/L			12/03/21 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*68 - 130*		*12/03/21 18:28*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*12/03/21 18:28*	*1*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*		*12/03/21 18:28*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*12/03/21 18:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**916**		50.0		ug/L		12/08/21 08:27	12/09/21 02:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			12/06/21 13:38	1
pH	**7.8**	**HF**	0.1		SU			12/09/21 16:07	1
Temperature	**21.7**	**HF**	0.001		Degrees C			12/09/21 16:07	1

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

Job ID: 480-192968-1

Client Sample ID: Influent
Date Collected: 12/02/21 11:45
Date Received: 12/02/21 12:35

Lab Sample ID: 480-192968-2
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		31		ug/L			12/03/21 18:53	80
1,1-Dichloroethane	ND		47		ug/L			12/03/21 18:53	80
1,1-Dichloroethene	ND		68		ug/L			12/03/21 18:53	80
Benzene	ND		48		ug/L			12/03/21 18:53	80
Chlorobenzene	ND		38		ug/L			12/03/21 18:53	80
Chloroethane	ND		70		ug/L			12/03/21 18:53	80
cis-1,2-Dichloroethene	ND		46		ug/L			12/03/21 18:53	80
Toluene	ND		36		ug/L			12/03/21 18:53	80
Trichloroethene	ND		48		ug/L			12/03/21 18:53	80
o-Chlorotoluene	**2100**		26		ug/L			12/03/21 18:53	80

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*68 - 130*		*12/03/21 18:53*	*80*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/03/21 18:53*	*80*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*		*12/03/21 18:53*	*80*
Toluene-d8 (Surr)	*96*		*77 - 120*		*12/03/21 18:53*	*80*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1320**		50.0		ug/L		12/08/21 08:27	12/09/21 02:57	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0		mg/L			12/06/21 13:38	1
pH	**7.1**	**HF**	0.1		SU			12/09/21 16:09	1
Temperature	**21.8**	**HF**	0.001		Degrees C			12/09/21 16:09	1

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

Job ID: 480-192968-1

Client Sample ID: Trip Blank
Date Collected: 12/02/21 00:00
Date Received: 12/02/21 12:35

Lab Sample ID: 480-192968-3
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			12/03/21 19:16	1
1,1-Dichloroethane	ND		5.0		ug/L			12/03/21 19:16	1
1,1-Dichloroethene	ND		5.0		ug/L			12/03/21 19:16	1
Benzene	ND		5.0		ug/L			12/03/21 19:16	1
Chlorobenzene	ND		5.0		ug/L			12/03/21 19:16	1
Chloroethane	ND		5.0		ug/L			12/03/21 19:16	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			12/03/21 19:16	1
Toluene	ND		5.0		ug/L			12/03/21 19:16	1
Trichloroethene	ND		5.0		ug/L			12/03/21 19:16	1
o-Chlorotoluene	ND		5.0		ug/L			12/03/21 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*68 - 130*		*12/03/21 19:16*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*12/03/21 19:16*	*1*
4-Bromofluorobenzene (Surr)	*91*		*76 - 123*		*12/03/21 19:16*	*1*
Toluene-d8 (Surr)	*97*		*77 - 120*		*12/03/21 19:16*	*1*

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

Lab Sample ID: MB 480-607544/8
Matrix: Water
Analysis Batch: 607544

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			12/03/21 16:09	1
1,1-Dichloroethane	ND		5.0		ug/L			12/03/21 16:09	1
1,1-Dichloroethene	ND		5.0		ug/L			12/03/21 16:09	1
Benzene	ND		5.0		ug/L			12/03/21 16:09	1
Chlorobenzene	ND		5.0		ug/L			12/03/21 16:09	1
Chloroethane	ND		5.0		ug/L			12/03/21 16:09	1
cis-1,2-Dichloroethene	ND		5.0		ug/L			12/03/21 16:09	1
Toluene	ND		5.0		ug/L			12/03/21 16:09	1
Trichloroethene	ND		5.0		ug/L			12/03/21 16:09	1
o-Chlorotoluene	ND		5.0		ug/L			12/03/21 16:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*68 - 130*		*12/03/21 16:09*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*12/03/21 16:09*	*1*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*12/03/21 16:09*	*1*
Toluene-d8 (Surr)	*95*		*77 - 120*		*12/03/21 16:09*	*1*

Lab Sample ID: LCS 480-607544/6
Matrix: Water
Analysis Batch: 607544

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	18.3		ug/L		91	52 - 162
1,1-Dichloroethane	20.0	18.9		ug/L		95	59 - 155
1,1-Dichloroethene	20.0	19.3		ug/L		96	1 - 234
Benzene	20.0	20.6		ug/L		103	37 - 151
Chlorobenzene	20.0	20.3		ug/L		101	37 - 160
Chloroethane	20.0	14.9		ug/L		75	14 - 230
Toluene	20.0	19.5		ug/L		98	47 - 150
Trichloroethene	20.0	19.1		ug/L		95	71 - 157

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*68 - 130*
Dibromofluoromethane (Surr)	*97*		*75 - 123*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*
Toluene-d8 (Surr)	*96*		*77 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-607674/1-A
Matrix: Water
Analysis Batch: 608177

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 607674

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0		ug/L		12/08/21 08:27	12/09/21 02:21	1

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

Lab Sample ID: LCS 480-607674/2-A
Matrix: Water
Analysis Batch: 608177

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 607674

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10000	10280		ug/L		103	85 - 115		

Lab Sample ID: 480-192968-1 MS
Matrix: Water
Analysis Batch: 608177

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 607674

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	916		10000	10900		ug/L		100	70 - 130		

Lab Sample ID: 480-192968-1 MSD
Matrix: Water
Analysis Batch: 608177

Client Sample ID: Effluent
Prep Type: Total Recoverable
Prep Batch: 607674

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	916		10000	11110		ug/L		102	70 - 130	2	20

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

Lab Sample ID: MB 480-607712/1
Matrix: Water
Analysis Batch: 607712

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			12/06/21 13:38	1

Lab Sample ID: LCS 480-607712/2
Matrix: Water
Analysis Batch: 607712

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			352	350.4		mg/L		99	88 - 110		

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-608298/1
Matrix: Water
Analysis Batch: 608298

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: 480-192968-1

GC/MS VOA

Analysis Batch: 607544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192968-1	Effluent	Total/NA	Water	624.1	
480-192968-2	Influent	Total/NA	Water	624.1	
480-192968-3	Trip Blank	Total/NA	Water	624.1	
MB 480-607544/8	Method Blank	Total/NA	Water	624.1	
LCS 480-607544/6	Lab Control Sample	Total/NA	Water	624.1	

Metals

Prep Batch: 607674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192968-1	Effluent	Total Recoverable	Water	200.7	
480-192968-2	Influent	Total Recoverable	Water	200.7	
MB 480-607674/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 480-607674/2-A	Lab Control Sample	Total Recoverable	Water	200.7	
480-192968-1 MS	Effluent	Total Recoverable	Water	200.7	
480-192968-1 MSD	Effluent	Total Recoverable	Water	200.7	

Analysis Batch: 608177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192968-1	Effluent	Total Recoverable	Water	200.7 Rev 4.4	607674
480-192968-2	Influent	Total Recoverable	Water	200.7 Rev 4.4	607674
MB 480-607674/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	607674
LCS 480-607674/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	607674
480-192968-1 MS	Effluent	Total Recoverable	Water	200.7 Rev 4.4	607674
480-192968-1 MSD	Effluent	Total Recoverable	Water	200.7 Rev 4.4	607674

General Chemistry

Analysis Batch: 607712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192968-1	Effluent	Total/NA	Water	SM 2540D	
480-192968-2	Influent	Total/NA	Water	SM 2540D	
MB 480-607712/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-607712/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 608298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-192968-1	Effluent	Total/NA	Water	SM 4500 H+ B	
480-192968-2	Influent	Total/NA	Water	SM 4500 H+ B	
LCS 480-608298/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 480-192968-1

Client Sample ID: Effluent

Lab Sample ID: 480-192968-1

Date Collected: 12/02/21 11:30
Matrix: Water
Date Received: 12/02/21 12:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	607544	12/03/21 18:28	ATG	TAL BUF
Total Recoverable	Prep	200.7			607674	12/08/21 08:27	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	608177	12/09/21 02:28	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	607712	12/06/21 13:38	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	608298	12/09/21 16:07	KEB	TAL BUF

Client Sample ID: Influent

Lab Sample ID: 480-192968-2

Date Collected: 12/02/21 11:45
Matrix: Water
Date Received: 12/02/21 12:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		80	607544	12/03/21 18:53	ATG	TAL BUF
Total Recoverable	Prep	200.7			607674	12/08/21 08:27	NBS	TAL BUF
Total Recoverable	Analysis	200.7 Rev 4.4		1	608177	12/09/21 02:57	LMH	TAL BUF
Total/NA	Analysis	SM 2540D		1	607712	12/06/21 13:38	EJL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	608298	12/09/21 16:09	KEB	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-192968-3

Date Collected: 12/02/21 00:00
Matrix: Water
Date Received: 12/02/21 12:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	607544	12/03/21 19:16	ATG	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, 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: 480-192968-1

Laboratory: Eurofins TestAmerica, 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	04-01-22

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: 480-192968-1

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 TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

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

Job ID: 480-192968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-192968-1	Effluent	Water	12/02/21 11:30	12/02/21 12:35
480-192968-2	Influent	Water	12/02/21 11:45	12/02/21 12:35
480-192968-3	Trip Blank	Water	12/02/21 00:00	12/02/21 12:35

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: Emily Au	Lab PM: VanDette, Ryan T	Carrier Tracking No(s):	COC No: 480-166255-28522.1
Client Contact: Chad Moose	Phone: 716-531-3312	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 #: 10132351			
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, 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, 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	12/2/21	1130	G	Water			1	3	1	1		
Influent	12/2/21	1145	G	Water			1	3	1	1		
Trip Blank	12/2/21	—	Trip	Water				1				

480-192968 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: Emily Au	Date/Time: 12/2/21 1235	Company Arcom	Received by: Unknow Cikolb	Date/Time: 12/2/21 123	Company STA		
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: 2.4 #1 ICE				

Ver: 06/08/2021