



**VIA ELECTRONIC MAIL**

March 27, 2025

Karen A. Cahill  
Environmental Engineer  
Spill Response, Division of Environmental Remediation  
New York State Department of Environmental Conservation R7  
5786 Widewaters Parkway  
Syracuse, NY 13214-1867

**Subject: March 2025 (Monthly and Quarterly) SPDES PEq Sampling Results  
Emerson Electric Co. Site in Ithaca, New York (DER Site No. 7-55-010)**

Dear Ms. Cahill:

On behalf of Emerson Electric Co. (Emerson), WSP USA Inc. (WSP) collected water discharge samples on March 10, 2025, from Outfalls 01A and 001 at the former Emerson Power Transmission site at 620 South Aurora Street in Ithaca, New York (Figure 1). The samples were collected in accordance with Emerson's Project Site Remediation Wastewater Discharge State Pollutant Discharge Elimination System (SPDES) Permit Equivalent (PEq), effective on August 1, 2022<sup>1</sup>, and modified on October 11, 2024.

Please find enclosed the following information pertaining to this sampling event:

- Monthly and quarterly SPDES PEq results for Outfalls 01A and 001 are summarized in the enclosed Tables 1 and 2. The results for Outfall 001 also include the results of a duplicate sample, designated Outfall 001D. All samples were analyzed by methods approved under Title 40 Code of Federal Regulations Part 136. WSP measured pH, temperature, and flow of applicable discharges in the field. The remaining parameters were analyzed offsite by the following laboratories accredited under the New York State's Environmental Laboratory Approval Program (ELAP):
  - SGS North America Inc. in Dayton, New Jersey (ELAP identification number [ID] 10983)
  - Hoffman Analytic Service Inc. DBA Alloway in Marion, Ohio (ELAP ID 11071)
- Documentation of pH, temperature, and flow measurements collected in the field in March 2025, associated pH meter calibration records, and flow calculation for Outfall 001 (Enclosure A)
- Laboratory analytical data for the March 2025 SPDES PEq sampling event (Enclosure B)
- Tables summarizing all sampling results for each outfall from September 2022 to March 2025 (Enclosure C)

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<sup>1</sup>Emerson began complying with SPDES PEq on September 7, 2022, which is the date when the existing SPDES permit for the site (NY 0002933) was terminated by the New York State Department of Environmental Conservation, Division of Environmental Permits.



As indicated in Tables 1 and 2, none of the parameters detected in the March 2025 samples exceeded the SPDES PEq discharge limits.

If you have any questions regarding the enclosed information, please contact me at (315) 374-1175 or at amy.romano@wsp.com.

Sincerely yours,

A handwritten signature in black ink that reads "Amy M. Romano". The signature is written in a cursive style with a horizontal line at the end.

Amy M. Romano  
Senior Technical Manager, Environmental Science

Enclosures

cc: Stephen L. Clarke, Emerson  
Lisa Kelly, WSP

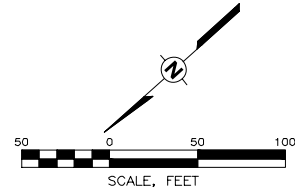
FIGURE



- LEGEND**
- 34 BUILDING NUMBER
  - SANITARY SEWER
  - PROPERTY LINE
  - DRAINAGE DITCH
  - BOUNDARY FOR OU-1 (RETAINED PROPERTY)
  - BOUNDARY FOR OU-2

**D**

REFERENCE: IMAGE FROM NEARMAP, 4/26/2024.



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REV	DESCRIPTION
1	Issue
2	Issue
3	Issue

DATE

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**OUTFALL LOCATIONS**  
 EMERSON ELECTRIC CO.  
 ITHACA, NEW YORK  
 PREPARED FOR  
 EMERSON  
 ST. LOUIS, MISSOURI

WSP USA, Inc.  
 11 STANWIX STREET, SUITE 950  
 PITTSBURGH, PA 15222  
 TEL: +1 412.604.1040

**FIGURE 1**  
 Drawing Number  
**314MN5608.001-001**

## TABLES

Table 1

**SPDES Permit Equivalent Discharge Results - Outfall 01A**  
**Emerson Electric Co.**  
**Ithaca, New York (a)**

Parameter	CAS No.	Units	Discharge Limit (b)	Result (c)
				03/10/25
Flow	NA	GPD	Monitor	<b>1,543 (d); 11,232 (e)</b>
pH (range)	NA	SU	6.5 - 8.5	<b>7.9</b>
Temperature	NA	deg F	Monitor	<b>58.3</b>
Tetrachloroethene	127-18-4	µg/l	1	ND (0.41)
Trichloroethene	79-01-6	µg/l	10	ND (0.43)
Sum of Dichlorobenzenes	95-50-1; 541-73-1; 106-46-7	µg/l	10	ND (1.91)
Bromoform	75-25-2	µg/l	10	ND (0.60)
Chlorobenzene	108-90-7	µg/l	5	ND (0.87)
Chlorodibromomethane	124-48-1	µg/l	10	ND (0.98)
Chloroform	67-66-3	µg/l	10	ND (0.50)
Free Cyanide	NA	µg/l	Monitor (f)	ND (0.8)
Dichlorobromomethane	75-27-4	µg/l	10	ND (0.94)
1,1-Dichloroethane	75-34-3	µg/l	10	ND (0.42)
1,1-Dichloroethene	75-35-4	µg/l	10	ND (0.45)
Methylene chloride	75-09-2	µg/l	10	ND (0.80)
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	10	ND (0.73)
Toluene	108-88-3	µg/l	50	ND (0.77)
trans-1,2-Dichloroethene	156-60-5	µg/l	10	ND (0.46)
cis-1,2-Dichloroethene	156-59-2	µg/l	10	<b>1.9</b>
1,1,1-Trichloroethene	71-55-6	µg/l	10	ND (0.43)
Xylenes, total	1330-20-7	µg/l	10	ND (0.76)
Vinyl chloride	75-01-4	µg/l	10	ND (0.79)
Benzene	71-43-2	µg/l	1	ND (0.71)

**Bold value is a detected concentration or measurement.**

- a/ CAS No. = Chemical Abstracts Service registry number; GPD = gallons per day; SU = standard units; deg F = degrees Fahrenheit; µg/l = micrograms per liter.
- b/ Discharge limit specified in Emerson Electric Co. Project Site Remediation Wastewater Discharge SPDES Permit Equivalent, dated August 1, 2022, DER Site ID# 7-55-010.
- c/ ND = not detected above method detection limit provided in parentheses.
- d/ Estimated average flow based on totalizer readings of 1,846,908.92 gallons on February 20, 2025, and 1,874,687.96 gallons on March 10, 2025.
- e/ Estimated maximum flow rate during a batch discharge of the groundwater treatment system. Because the discharge is not continuous, the actual maximum daily flow rate would be less than this value.
- f/ Per Footnote 1 of SPDES Permit Equivalent, an interim limit of Monitor Only shall apply for free cyanide from August 1, 2022, until July 31, 2025. The water quality-based effluent limit of 5.2 µg/l Monthly Average and 22 µg/l Daily Maximum for free cyanide will become effective on August 1, 2025.

Table 2

**SPDES Permit Equivalent Discharge Results - Outfall 001**  
**Emerson Electric Co.**  
**Ithaca, New York (a)**

Parameter	CAS No.	Units	Discharge Limit (b)	Result (c)	
				Outfall 001	Outfall 001D (d)
				03/10/25	03/10/25
Flow	NA	GPD	Monitor	<b>14,722 (e)</b>	NA
pH (range)	NA	SU	6.5 - 8.5	<b>8.1</b>	NA
Barium	7440-39-3	µg/l	Monitor	<b>138 J</b>	<b>133 J</b>
Total Lead	7439-92-1	µg/l	7.4	ND (2.4)	ND (2.4)
Mercury	7439-97-6	ng/l	Monitor	<b>8.3</b>	<b>7.3</b>
Tetrachloroethene	127-18-4	µg/l	1	ND (0.41)	ND (0.41)
Trichloroethene	79-01-6	µg/l	10	ND (0.43)	ND (0.43)
Free Cyanide	NA	µg/l	Monitor (f)	<b>4</b>	<b>4</b>

**Bold value is a detected concentration or measurement.**

- a/ CAS No. = Chemical Abstracts Service registry number; NA = not applicable; GPD = gallons per day; SU = standard units; µg/l = micrograms per liter; ng/l = nanograms per liter.
- b/ Discharge limit specified in Emerson Electric Co. Project Site Remediation Wastewater Discharge SPDES Permit Equivalent, dated August 1, 2022, DER Site ID# 7-55-010.
- c/ ND = not detected above method detection limit provided in parentheses.  
 NA = not analyzed for this parameter.  
 J = estimated concentration.
- d/ Outfall 001D is a duplicate sample of Outfall 001.
- e/ Estimated based on field measurement and V-notch (triangular) weir calculator (<https://www.lmnoeng.com/Weirs/vweir.php>).
- f/ Per Footnote 1 of SPDES Permit Equivalent, an interim limit of Monitor Only shall apply from August 1, 2022, until July 31, 2025. The water quality-based effluent limit of 5.2 µg/l Monthly Average and 22 µg/l Daily Maximum for Cyanide will become effective on August 1, 2025.

ENCLOSURE A – FIELD MEASUREMENTS, PH METER CALIBRATION RECORD,  
AND FLOW CALCULATION



**Emerson Electric Co.  
620 South Aurora Street  
Ithaca, NY (a)**

Date	Sample Location	Sampler's Name	Time of Sample Collection	pH Testing Method (b)	pH Meter Calibration Date	pH Result (S.U.)	Temperature Testing Method (b)	Temperature	Temperature	Flow Estimate		
								(degrees C)	(degrees F)	Average (GPD)	Maximum (GPM) (d)	Maximum (GPD)
03/10/25	Outfall 01A	Kevin Griswold	13:30	SM 4500-H+ B	03/10/25	7.9	2500 B	14.6	58.3	1,543 (c)	7.8	11,232
03/10/25	Outfall 001	Kevin Griswold	10:50	SM 4500-H+ B	03/10/25	8.1	2500 B	12.3	54.1	-	2.25 inches	14,722 (e)

a/ S.U. = standard units; C = Celsius; F = Fahrenheit; GPD = gallons per day; GPM = gallons per minute.

b/ No sample preservation required per 40 CFR 136.3, Table II.

c/ Based on totalizer readings of 1,846,908.92 gallons on February 20, 2025, and 1,874,687.96 gallons on March 10, 2025.

d/ Estimated in the field on the day of sampling.

e/ Estimated using V-notch (triangular) weir calculator (<https://www.lmnoeng.com/Weirs/vweir.php>).

**pH Calibration Log**  
**Emerson Electric Co.**  
**620 South Aurora Street, Ithaca, NY**

**HACH PHC101 pH Meter**

Serial No. 172862567034

Date	Time	Calibrated By (Initials)	Buffer Temperature (°C)	pH 4.00 Standard	pH 7.0 Standard	pH 10.00 Standard	Slope	Comments about meter and calibration equipment
				Result	Result	Result		
3/10/2025	12:55	KGG	21.0	4.01	7.00	10.01	96%	Mix at 400 RPM, Cal. Passed: Calibration Solution Expiration Dates: pH 4 - 05/21/26; pH 7 - 07/17/26; pH 10 - 01/24/26.

LMNO Engineering, Research, and Software, Ltd.

V Notch Weir Calculator

Discharge and Head for Various Triangular Notch Angles

LMNO Engineering

[Consulting](#)

Related calculators

Free newsletters:

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Phone (USA): (740) 707-2614

*This page has a new layout*

Solve for:

Discharge ▼

www.LMNOeng.com

Discharge, Q:

gal/day (gpd) ▼

Head, h:

inch ▼

Notch Angle,  $\theta$ :

degrees ▼

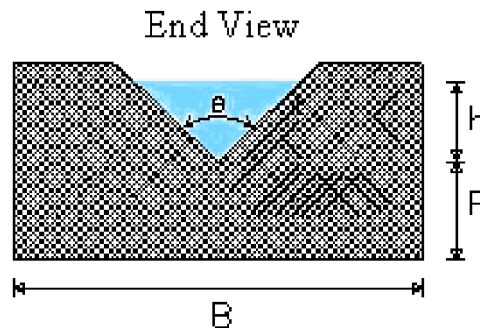
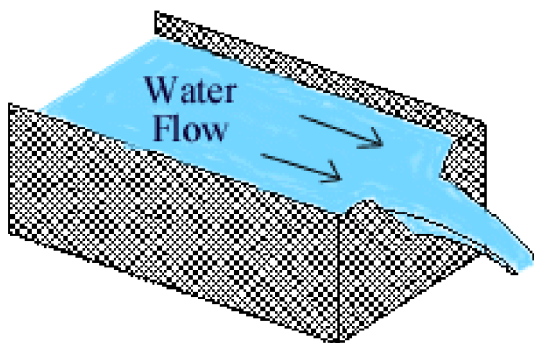
Discharge Coefficient, C:

Head Correction Factor, k:

inch

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**Units:** ft<sup>3</sup>=cubic foot, gal=US gallons, m<sup>3</sup>=cubic meter, mm=millimeter, s=second



## Introduction

Weirs are typically installed in open channels such as streams to determine discharge (flowrate). The basic principle is that discharge is directly related to the water depth above the crotch (bottom) of the V; this distance is called head ( $h$ ). The V-notch design causes small changes in discharge to have a large change in depth allowing more accurate head measurement than with a rectangular weir.

## V-Notch Weir (Triangular Weir) Equations

V-notch weir equations have become somewhat standardized. ISO (1980), ASTM (1993), and USBR (1997) all suggest using the Kindsvater-Shen equation, which is presented below from USBR (1997) for Q in cfs and heights in ft units. All of the references show similar curves for C and k vs. angle, but none of them provide equations for the curves. To produce automated calculations, LMNO Engineering used a curve fitting program to obtain the equations which best fit the C and k curves. Our equations are shown below. The graph shown is from our fits. If you compare it to the graphs shown in the references, it looks nearly identical which implies that our fits are very good.

$$Q = 4.28 C \tan\left(\frac{\theta}{2}\right) (h + k)^{5/2}$$

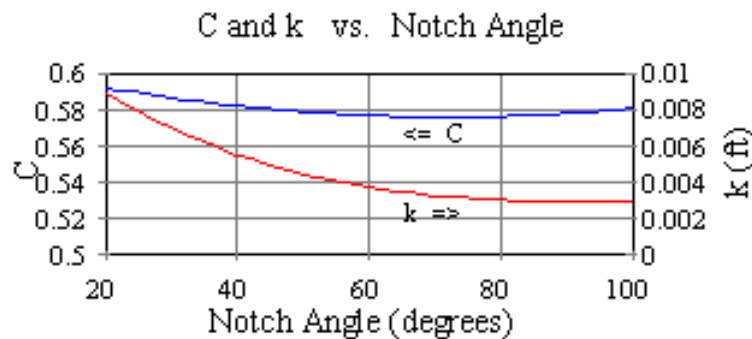
where Q = Discharge (cfs)

C = Discharge Coefficient

$\theta$  = Notch Angle

h = Head (ft)

k = Head Correction  
Factor (ft)



$$C = 0.607165052 - 0.000874466963 \theta + 6.10393334 \times 10^{-6} \theta^2$$

$$k \text{ (ft.)} = 0.0144902648 - 0.00033955535 \theta + 3.29819003 \times 10^{-6} \theta^2 - 1.06215442 \times 10^{-8} \theta^3$$

where  $\theta$  is the notch angle in degrees

## Installation Guidelines and Equation Applicability

USBR (1997) suggests using the V-notch weir equations for the following conditions:

Head (h) should be measured at a distance of at least 4h upstream of the weir.

It doesn't matter how thick the weir is except where water flows over the weir through the "V." The weir should be between 0.03 and 0.08 inches (0.8 to 2 mm) thick in the V. If the bulk of the weir is thicker than 0.08 inch, the downstream edge of the V can be chamfered at an angle greater than 45° (60° is recommended) to achieve the desired thickness of the edges. You want to avoid having water cling to the downstream face of the weir.

Water surface downstream of the weir should be at least 0.2 ft. (6 cm) below the bottom of the V to allow a free flowing waterfall.

Measured head (h) should be greater than 0.2 ft. (6 cm) due to potential measurement error at such small heads and the fact that the nappe (waterfall) may cling to the weir.

The equations have been developed for  $h < 1.25$  ft. (38 cm) and  $h/P < 2.4$ .

The equations have been developed for fully contracted V-notch weirs which means  $h/B$  should be  $\leq 0.2$ .

The average width of the approach channel (B) should be  $> 3$  ft. (91 cm).

The bottom of the "V" should be at least 1.5 ft. (45 cm) above the bottom of the upstream channel.

If your weir does not achieve some of the above criteria, you may have a "partially contracted V-notch weir" where  $h/B$  needs only to be  $\leq 0.4$ , the bottom of the "V" only needs to be 4 inch (10 cm) above the bottom of the upstream channel, the approach channel only needs to be 2 ft. (61 cm) wide, and  $h$  can be up to 2 ft. (61 cm) instead of 1.25 ft. (38 cm). Partially contracted weirs use a different graph for  $C$  which is a function of  $h/P$  and  $P/B$  and is only valid for a notch angle of  $90^\circ$ . In the graph (not shown - see USBR, 1997),  $C$  varies from 0.576 to 0.6; whereas, for a fully contracted  $90^\circ$  notch,  $C$  is 0.578 from our graph shown above. Our calculation does not account for partially contracted weirs, but for most practical purposes the difference in  $C$  is inconsequential.

## Error Messages

*"All inputs must be positive"*. This is an initial check of user input.

*"Angle out of range"*. The notch angle must be between  $20^\circ$  and  $100^\circ$  (0.35 and 1.75 radians) for the equations to be valid.

*"Infeasible input"*. Input results in a negative head due to the compiler's machine precision. Occurs if head is being computed and a very low  $Q$  is entered (e.g.  $1.0e-20$ ).

## References

ASTM. (1993). American Society for Testing and Materials. ASTM D5242. Standard method for open-channel flow measurement of water with thin-plate weirs. 1993.

ISO. (1980). International Organization of Standards. ISO 1438/1-1980(E). Water flow measurement in open channels using weirs and venturi flumes - Part 1: Thin plate weirs. 1980.

USBR. (1997). U.S. Department of the Interior, Bureau of Reclamation. Water Measurement Manual. 3ed. Available from <http://www.usbr.gov/tsc/techreferences/mands/wmm/index.htm> .

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## ENCLOSURE B – LABORATORY ANALYTICAL DATA

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

**WSP USA Environment & Infrastructure Inc**

**Emersub 15, LLC, Ithaca, NY**

**P117838US001**

**SGS Job Number: JE7086**

**Sampling Date: 03/10/25**



### Report to:

**WSP USA  
7000 E. GENESEE STREET BUILDING D, 2ND FLOOR  
FAYETTEVILLE, NY 13066  
Amy.Romano@WSPGroup.com; Jeffrey.Baker@WSP.com;  
Kevin.Griswold@wsp.com  
ATTN: Amy Romano**

**Total number of pages in report: 16**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

**Olga Azarian  
Technical Director**

**Client Service contact: Tammy McCloskey 732-329-0200**

Certifications: NJ(12129),NY(10983),CA,CO,CT,FL,HI,IL,IN,KY,LA (120428),MA,MD,ME,MN,NC,NH,NV,AK (UST-103),AZ (AZ0786),PA(68-00408),RI,SC,TX (T104704234),UT,VA,WA,WV

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Test results relate only to samples analyzed.

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## Sample Summary

WSP USA Environment & Infrastructure Inc

**Job No:** JE7086

Emersub 15, LLC, Ithaca, NY

Project No: P117838US001

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JE7086-1	03/10/25	13:30	KG	03/11/25	AQ	Water	OUTFALL 01A
JE7086-2	03/10/25	14:00	KG	03/11/25	AQ	Water	OUTFALL 001
JE7086-3	03/10/25	10:30	KG	03/11/25	AQ	Water	OUTFALL 001D
JE7086-4	03/10/25	14:30	KG	03/11/25	AQ	Field Blank Water	FIELD BLANK

## Summary of Hits

**Job Number:** JE7086  
**Account:** WSP USA Environment & Infrastructure Inc  
**Project:** Emersub 15, LLC, Ithaca, NY  
**Collected:** 03/10/25

2

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

**JE7086-1      OUTFALL 01A**

cis-1,2-Dichloroethene      1.9      1.0      0.51      ug/l      EPA 624.1

**JE7086-2      OUTFALL 001**

Barium      138 J      200      17      ug/l      EPA 200.7  
Mercury      8.3      0.50      0.15      ng/l      EPA 1631 REV E

**JE7086-3      OUTFALL 001D**

Barium      133 J      200      17      ug/l      EPA 200.7  
Mercury      7.3      0.50      0.15      ng/l      EPA 1631 REV E

**JE7086-4      FIELD BLANK**

No hits reported in this sample.

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> OUTFALL 01A		
<b>Lab Sample ID:</b> JE7086-1		<b>Date Sampled:</b> 03/10/25
<b>Matrix:</b> AQ - Water		<b>Date Received:</b> 03/11/25
<b>Method:</b> EPA 624.1		<b>Percent Solids:</b> n/a
<b>Project:</b> Emersub 15, LLC, Ithaca, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D142628.D	1	03/13/25 14:39	NW	n/a	n/a	V4D6268
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.71	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.94	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.87	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.98	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.91	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.9	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.80	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.73	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.77	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.76	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	99%		80-128%
2037-26-5	Toluene-D8 (SUR)	97%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	95%		79-117%
1868-53-7	Dibromofluoromethane (S)	90%		84-121%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> OUTFALL 001	<b>Date Sampled:</b> 03/10/25
<b>Lab Sample ID:</b> JE7086-2	<b>Date Received:</b> 03/11/25
<b>Matrix:</b> AQ - Water	<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624.1	
<b>Project:</b> Emersub 15, LLC, Ithaca, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D142629.D	1	03/13/25 15:20	NW	n/a	n/a	V4D6268
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%		80-128%
2037-26-5	Toluene-D8 (SUR)	97%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	96%		79-117%
1868-53-7	Dibromofluoromethane (S)	90%		84-121%

---

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> OUTFALL 001	<b>Date Sampled:</b> 03/10/25
<b>Lab Sample ID:</b> JE7086-2	<b>Date Received:</b> 03/11/25
<b>Matrix:</b> AQ - Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Emersub 15, LLC, Ithaca, NY	

### Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Barium	138 J	200	17	ug/l	1	03/12/25	03/12/25 MM	EPA 200.7 <sup>1</sup>	EPA 200.7 <sup>3</sup>
Lead	2.4 U	3.0	2.4	ug/l	1	03/12/25	03/12/25 MM	EPA 200.7 <sup>1</sup>	EPA 200.7 <sup>3</sup>
Mercury	8.3	0.50	0.15	ng/l	1	03/13/25	03/14/25 NV	EPA 1631 REV E <sup>2</sup>	EPA 1631 <sup>4</sup>

(1) Instrument QC Batch: MA58059

(2) Instrument QC Batch: MA58084

(3) Prep QC Batch: MP53140

(4) Prep QC Batch: MP53190

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Report of Analysis

<b>Client Sample ID:</b> OUTFALL 001D	<b>Date Sampled:</b> 03/10/25
<b>Lab Sample ID:</b> JE7086-3	<b>Date Received:</b> 03/11/25
<b>Matrix:</b> AQ - Water	<b>Percent Solids:</b> n/a
<b>Method:</b> EPA 624.1	
<b>Project:</b> Emersub 15, LLC, Ithaca, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D142639.D	1	03/13/25 20:00	NW	n/a	n/a	V4D6268
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

### VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	99%		80-128%
2037-26-5	Toluene-D8 (SUR)	96%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	96%		79-117%
1868-53-7	Dibromofluoromethane (S)	91%		84-121%

---

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> OUTFALL 001D	<b>Date Sampled:</b> 03/10/25
<b>Lab Sample ID:</b> JE7086-3	<b>Date Received:</b> 03/11/25
<b>Matrix:</b> AQ - Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Emersub 15, LLC, Ithaca, NY	

### Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Barium	133 J	200	17	ug/l	1	03/12/25	03/12/25 MM	EPA 200.7 <sup>1</sup>	EPA 200.7 <sup>3</sup>
Lead	2.4 U	3.0	2.4	ug/l	1	03/12/25	03/12/25 MM	EPA 200.7 <sup>1</sup>	EPA 200.7 <sup>3</sup>
Mercury	7.3	0.50	0.15	ng/l	1	03/13/25	03/14/25 NV	EPA 1631 REV E <sup>2</sup>	EPA 1631 <sup>4</sup>

(1) Instrument QC Batch: MA58059

(2) Instrument QC Batch: MA58084

(3) Prep QC Batch: MP53140

(4) Prep QC Batch: MP53190

RL = Reporting Limit  
 MDL = Method Detection Limit

U = Indicates a result < MDL  
 J = Indicates a result > = MDL but < RL



## Report of Analysis

<b>Client Sample ID:</b> FIELD BLANK	<b>Date Sampled:</b> 03/10/25
<b>Lab Sample ID:</b> JE7086-4	<b>Date Received:</b> 03/11/25
<b>Matrix:</b> AQ - Field Blank Water	<b>Percent Solids:</b> n/a
<b>Project:</b> Emersub 15, LLC, Ithaca, NY	

### Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	0.15 U	0.50	0.15	ng/l	1	03/13/25	03/13/25 NV	EPA 1631 REV E <sup>1</sup>	EPA 1631 <sup>2</sup>

(1) Instrument QC Batch: MA58068

(2) Prep QC Batch: MP53190

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-328-0200 FAX: 732-328-3499/3480
www.sgs.com/nahusa

WW
FB

REP: 77736914886
E-mail: 03925-65
SGS Order # JE7086

Client/Reporting Information, Project Information, Collection, Turn Around Time, Deliverable, Comments, Receipts, and Chain of Custody table.

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4

Initials
Label



## SGS Sample Receipt Summary

Job Number: je7086

Client: WSP USA

Project: EMERSUB 15, LLC, ITHACA, NY

Date / Time Received: 3/11/2025 10:25:00 AM

Delivery Method: fedex

Airbill #'s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0); Cooler 2: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.4); Cooler 2: (3.4);

**Cooler Security**

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. SmpI Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | <u>IR-50</u>                        |                          |
| 3. Cooler media:             | <u>Ice (Bag)</u>                    |                          |
| 4. No. Coolers:              | <u>2</u>                            |                          |

**Quality Control Preservatio**

Y or N

N/A

- |                                 |                                     |                                     |                          |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

**Sample Integrity - Documentation**

Y or N

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | <u>Intact</u>                       |                          |

**Sample Integrity - Instructions**

Y or N

N/A

- |   |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instrctdns clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
--------------------	------------------------	------------------------	------------------------

Comments

SM089-03  
Rev. Date 12/7/17

**JE7086: Chain of Custody**

Page 2 of 2

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### Internal Sample Tracking Chronicle

WSP USA Environment & Infrastructure Inc

Job No: JE7086

Emersub 15, LLC, Ithaca, NY  
 Project No: P117838US001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JE7086-1 Collected: 10-MAR-25 13:30 By: KG Received: 11-MAR-25 By: EC OUTFALL 01A						
JE7086-1	EPA 624.1	13-MAR-25 14:39	NW			V624SL1
JE7086-2 Collected: 10-MAR-25 14:00 By: KG Received: 11-MAR-25 By: EC OUTFALL 001						
JE7086-2	EPA 200.7	12-MAR-25 21:02	MM	12-MAR-25	SK	BA,PB
JE7086-2	EPA 624.1	13-MAR-25 15:20	NW			V624SL
JE7086-2	EPA 1631 REV E	14-MAR-25 18:15	NV	13-MAR-25	NV	HGLL1631
JE7086-3 Collected: 10-MAR-25 10:30 By: KG Received: 11-MAR-25 By: EC OUTFALL 001D						
JE7086-3	EPA 200.7	12-MAR-25 21:07	MM	12-MAR-25	SK	BA,PB
JE7086-3	EPA 624.1	13-MAR-25 20:00	NW			V624SL
JE7086-3	EPA 1631 REV E	14-MAR-25 18:20	NV	13-MAR-25	NV	HGLL1631
JE7086-4 Collected: 10-MAR-25 14:30 By: KG Received: 11-MAR-25 By: EC FIELD BLANK						
JE7086-4	EPA 1631 REV E	13-MAR-25 16:01	NV	13-MAR-25	NV	HGLL1631

# SGS Internal Chain of Custody

**Job Number:** JE7086  
**Account:** WSPENYC WSP USA Environment & Infrastructure Inc  
**Project:** Emersub 15, LLC, Ithaca, NY  
**Received:** 03/11/25

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4

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JE7086-1.1	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-1.2	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-1.2	Nicholas Weigand	GCMS4D	03/12/25 13:17	Load on Instrument
Analyst chain of custody update error.				
JE7086-1.2	GCMS4D	Nicholas Weigand	03/14/25 11:59	Unload from Instrument
JE7086-1.2	Nicholas Weigand	Secured Storage	03/14/25 11:59	Return to Storage
JE7086-1.3	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-1.4	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-2.1	Seamus D'angiolillo	Secured Storage	03/11/25 14:43	Return to Storage
JE7086-2.1	Secured Storage	Aleandi Rodriguez	03/11/25 22:29	Retrieve from Storage
JE7086-2.1	Aleandi Rodriguez	Secured Staging Area	03/11/25 22:29	Return to Storage
JE7086-2.1	Secured Staging Area	Brianna Perez	03/12/25 06:45	Retrieve from Storage
JE7086-2.1	Brianna Perez	Secured Storage	03/12/25 11:14	Return to Storage
JE7086-2.2	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-2.3	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-2.3	Nicholas Weigand	GCMS4D	03/12/25 13:17	Load on Instrument
Analyst chain of custody update error.				
JE7086-2.3	GCMS4D	Nicholas Weigand	03/14/25 11:59	Unload from Instrument
JE7086-2.3	Nicholas Weigand	Secured Storage	03/14/25 11:59	Return to Storage
JE7086-2.4	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-2.5	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-3.1	Seamus D'angiolillo	Secured Storage	03/11/25 14:43	Return to Storage
JE7086-3.1	Secured Storage	Aleandi Rodriguez	03/11/25 22:29	Retrieve from Storage
JE7086-3.1	Aleandi Rodriguez	Secured Staging Area	03/11/25 22:29	Return to Storage
JE7086-3.1	Secured Staging Area	Brianna Perez	03/12/25 06:45	Retrieve from Storage
JE7086-3.1	Brianna Perez	Secured Storage	03/12/25 11:14	Return to Storage
JE7086-3.2	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-3.3	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-3.4	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage
JE7086-3.5	Seamus D'angiolillo	Secured Storage	03/11/25 13:38	Return to Storage



**CERTIFICATE OF ANALYSIS**  
 Reported by Alloway - Marion  
 Chain of Custody attached

WSP  
 Attn: Amy Romano  
 7000 East Genesee St BD.D 2nd Floor  
 Fayetteville, NY 13066

Lab Project # 2508362  
 Received: 3/11/2025  
 Reported: 3/18/2025  
 Date/Time Sampled: 03/10/2025 13:30  
 Sampled By: KG  
 Sampled Matrix: Wastewater  
 Containers: 1

Project Name: EMERSON (Ithaca, NY)

Sample ID: Outfall 01A

Lab Sample # 2508362-01

NY Lab ID 11071

Analyte	Results	Estimated Value	Units	PQL	MDL	Analyst	Extraction Date	Analysis Date/Time
Method of Analysis: ASTM D7237-15A								
Cyanide, Free (pH 6)	<0.003	<0.0008	mg/L	0.003	0.0008	BCM		03/12/2025 12:31

Analysis Certified By:   
 Rhonda C Morris

*This report shall not be reproduced, except in its entirety, without the written approval of the laboratory.  
 The results presented on this Certificate of Analysis only reflect those parameters that were requested by the client on the chain of custody or other documentation received with the sample(s). The analytical results relate only to the items tested.*



**CERTIFICATE OF ANALYSIS**  
 Reported by Alloway - Marion  
 Chain of Custody attached

WSP  
 Attn: Amy Romano  
 7000 East Genesee St BD.D 2nd Floor  
 Fayetteville, NY 13066

Lab Project # 2508362  
 Received: 3/11/2025  
 Reported: 3/18/2025  
 Date/Time Sampled: 03/10/2025 14:00  
 Sampled By: KG  
 Sampled Matrix: Wastewater  
 Containers: 1

Project Name: EMERSON (Ithaca, NY)

Sample ID: Outfall 001

Lab Sample # 2508362-02

NY Lab ID 11071

Analyte	Results	Estimated Value	Units	PQL	MDL	Analyst	Extraction Date	Analysis Date/Time
Method of Analysis: ASTM D7237-15A								
Cyanide, Free (pH 6)	0.004		mg/L	0.003	0.0008	BCM		03/12/2025 12:31

Analysis Certified By:   
 Rhonda C Morris

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 The results presented on this Certificate of Analysis only reflect those parameters that were requested by the client on the chain of custody or other documentation received with the sample(s). The analytical results relate only to the items tested.*





**CERTIFICATE OF ANALYSIS**  
 Reported by Alloway - Marion  
 Chain of Custody attached

Lab Project # 2508362  
 Received: 3/11/2025  
 Reported: 3/18/2025  
 Date/Time Sampled: 03/10/2025 10:30  
 Sampled By: KG  
 Sampled Matrix: Wastewater  
 Containers: 1

WSP  
 Attn: Amy Romano  
 7000 East Genesee St BD.D 2nd Floor  
 Fayetteville, NY 13066

Project Name: EMERSON (Ithaca, NY)

Sample ID: Outfall 001D

Lab Sample # 2508362-03

NY Lab ID 11071

Analyte	Results	Estimated Value	Units	PQL	MDL	Analyst	Extraction Date	Analysis Date/Time
Method of Analysis: ASTM D7237-15A								
Cyanide, Free (pH 6)	0.004		mg/L	0.003	0.0008	BCM		03/12/2025 12:31

Analysis Certified By:   
 Rhonda C Morris

*This report shall not be reproduced, except in its entirety, without the written approval of the laboratory.  
 The results presented on this Certificate of Analysis only reflect those parameters that were requested by the client on the chain of custody or other documentation received with the sample(s). The analytical results relate only to the items tested.*



# Chain of Custody Record

This is a legal document that authorizes Alloway to perform testing on samples submitted under this agreement.

- 1101 North Cole Street, Lima, OH 45805  
(P) 419-223-1362 (F) 419-227-3792
- 1776 Marion-Waldo Road, Marion OH 43302  
(P) 740-389-5991 (F) 740-389-1481
- 1502 W. Fourth Street, Mansfield, OH 44906  
(P) 419-525-1644 (F) 419-524-5575

1/2

<b>Report To:</b> Amy Romano <b>Name:</b> WSP USA INC. <b>Company:</b> 250 W 34th St., 4th Fl <b>Address:</b> New York, NY 10119	<b>Invoice To (If Different):</b> Environmental Accounts Payable <b>Name:</b> WSP USA Inc. <b>Company:</b> 13530 Dulles Technology Drive <b>Address:</b> Herndon, VA 20171	<b>Project: 2508362</b> 
---	---	-----------------------------

Phone #: 315-374-1175	Fax #:	PO#: <b>P117837US001</b>
E-mail: amy.romano@wsp.com		

Project Name	EMERSON (Ithaca, NY)	Turnaround: (Rush Charges May Apply)
Sampler	KEVIN GRISWOLD 607-351-8239 <i>Kevin Griswold</i>	Next Day <input type="checkbox"/> 3 Working Days <input type="checkbox"/> 2 Working Days <input type="checkbox"/> 5 Working Days <input type="checkbox"/> Routine <input checked="" type="checkbox"/>

	Customer Sample ID / Sample Location	Sample Date	Sample Time	Composite	Grab	Matrix Code	Number of Containers	Preservation Code #	Analysis Required	Alloway LIMS # For Lab Use Only
1	OUTFALL 01A	3/10/25	1330		X	WW	1	5	Free Cyanide by ASTM D7237-15A	01
2	OUTFALL 001	↓	1400		X	WW	1	5	Free Cyanide by ASTM D7237-15A	02
3	OUTFALL 001D	↓	1030		X	WW	1	5	Free Cyanide by ASTM D7237-15A	03
4										
5										
6										
7										
8										

Relinquished by:	Received by:	Date	Time	Method of Delivery	Matrix Codes:	Preservation Codes:	Sample Receiving (For Lab Use Only)
<i>Kevin Griswold</i>	UPS	3/10/25	1600	<input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> Fed Ex <i>(KG)</i> <input type="checkbox"/> Client <input type="checkbox"/> Alloway Pick Up <input type="checkbox"/> Alloway Sampling <input type="checkbox"/> Other	ww - wastewater gw - groundwater dw - drinking water sw - surface water w - water oil - oil s - solid sg - sludge l - leachate a - acid p - product o - other	1 - None      7 - Sodium Thiosulfate      13 - Zinc Acetate 2 - HNO <sub>3</sub> 8 - Ascorbic Acid      14 - Sodium Sulfite 3 - H <sub>2</sub> SO <sub>4</sub> 9 - Maleic Acid      15 - Potassium Dithyrogen Citrate 4 - HCl      10 - EDA      16 - Sodium Sulfite/Sodium Bisulfate 5 - NaOH      11 - Ammonium Chloride 6 - NaOH & Zinc Acetate      12 - (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> & NH <sub>4</sub> OH	Ice Present? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Proper Preservation? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Mar 105 Container Temperature: 2.4°C
Received for Laboratory By: (circle one) Mansfield Lima <b>Marion</b>		3/11/25	935				

Transported to: Lima Marion	By: _____	Received By: _____	Date: _____	Time: _____
Transported to: _____	By: _____	Received By: _____	Date: _____	Time: _____



ENCLOSURE C – RESULTS FROM SEPTEMBER 2022 TO MARCH 2025

Table C-1

SPDES Permit Equivalent Discharge Results - Outfall 01A  
Emerson Electric Co.  
Ithaca, New York

Parameter	Units (a)	Discharge Limit (b)	Result (c)												
			09/27/22	10/14/22	11/14/22	12/19/22	01/31/23	02/24/23	03/29/23	04/21/23	05/25/23	06/12/23	07/24/23	08/16/23	09/28/23
Flow	GPD	Monitor	<b>20,880 (d)</b>	<b>11,520 (d)</b>	<b>11,520 (d); 468 (e)</b>	<b>10,800 (d); 633 (e)</b>	<b>11520 (d); 767 (e)</b>	<b>11,520 (d); 696 (e)</b>	<b>11,520 (d); 986 (e)</b>	<b>11,520 (d); 604 (e)</b>	<b>11,520 (d); 162 (e)</b>	<b>11,520 (d); 69 (e)</b>	<b>10,080 (d); 433 (e)</b>	<b>11,520 (d); 369 (e)</b>	<b>12,672 (d); 267 (e)</b>
pH (range)	SU	6.5 - 8.5	<b>7.4</b>	<b>8.1</b>	<b>8.1</b>	<b>7.9</b>	<b>8.0</b>	<b>7.9</b>	<b>7.9</b>	<b>7.6</b>	<b>7.6</b>	<b>7.7</b>	<b>7.7</b>	<b>7.8</b>	<b>7.8</b>
Temperature	deg F	Monitor	<b>72.7</b>	<b>64.8</b>	<b>64.4</b>	<b>64.9</b>	<b>59.2</b>	<b>59</b>	<b>57</b>	<b>70</b>	<b>65.8</b>	<b>69.4</b>	<b>73.0</b>	<b>75.9</b>	<b>71.8</b>
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Sum of Dichlorobenzenes	µg/l	10	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.91)	ND (1.91)	ND (1.91)
Bromoform	µg/l	10	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Chlorobenzene	µg/l	5	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.87)	ND (0.87)	ND (0.87)
Chlorodibromomethane	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.98)	ND (0.98)	ND (0.98)
Chloroform	µg/l	10	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	<b>0.54 J</b>	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Free Cyanide	µg/l	Monitor (f)	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	ND (3)	<b>27</b>	ND (3)	ND (3)	ND (3) (g)	ND (3)
Dichlorobromomethane	µg/l	10	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.94)	ND (0.94)	ND (0.94)
1,1-Dichloroethane	µg/l	10	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
1,1-Dichloroethene	µg/l	10	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)
Methylene chloride	µg/l	10	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
1,1,2,2-Tetrachloroethane	µg/l	10	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.73)	ND (0.73)	ND (0.73)
Toluene	µg/l	50	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.77)	ND (0.77)	ND (0.77)
trans-1,2-Dichloroethene	µg/l	10	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)
cis-1,2-Dichloroethene	µg/l	10	<b>2.9</b>	<b>2.9</b>	<b>2.7</b>	<b>3.2</b>	<b>2.7</b>	ND (0.51)	<b>3.8</b>	ND (0.51)	<b>1.3</b>	ND (0.51)	ND (0.51)	<b>4.8</b>	<b>3.4</b>
1,1,1-Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Xylenes, total	µg/l	10	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.35)	ND (0.76)	ND (0.76)	ND (0.76)
Vinyl chloride	µg/l	10	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)
Benzene	µg/l	1	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.71)	ND (0.71)	ND (0.71)

**Bold value is a detected concentration or measurement.**

Table C-1

SPDES Permit Equivalent Discharge Results - Outfall 01A  
Emerson Electric Co.  
Ithaca, New York

Parameter	Units (a)	Discharge Limit (b)	Result (c)												
			10/4/23 (h)	10/23/23	11/16/23	12/19/23	01/24/24	1/25/24 (h)	02/12/24	03/07/24	04/15/24	05/16/24	6/3/24 (h)	06/17/24	07/09/24
Flow	GPD	Monitor	-	12,528 (d); 524 (e)	12,240 (d); 524 (e)	12,960 (d); 789 (e)	13,104 (d); 855 (e)	-	15,696 (d); 948 (e)	12,816 (d); 469 (e)	14,112 (d); 761 (e)	13,824 (d); 637 (e)	-	12,528 (d); 494 (e)	12,384 (d); 465 (e)
pH (range)	SU	6.5 - 8.5	-	8.1	8.3	8.2	8.0	-	7.8	7.9	7.9	7.7	-	7.8	7.7
Temperature	deg F	Monitor	-	70.2	65.3 - 67.3	62.4	59.4	-	61.7	68.0	70.2	78.8	-	76.3	81.0
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Sum of Dichlorobenzenes	µg/l	10	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)
Bromoform	µg/l	10	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Chlorobenzene	µg/l	5	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)
Chlorodibromomethane	µg/l	10	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)
Chloroform	µg/l	10	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Free Cyanide	µg/l	Monitor (f)	-	4 (i)	ND (3)	ND (3)	ND (3)	-	ND (3)	ND (3)	ND (3)	ND (3)	-	ND (3)	ND (3)
Dichlorobromomethane	µg/l	10	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)
1,1-Dichloroethane	µg/l	10	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
1,1-Dichloroethene	µg/l	10	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)
Methylene chloride	µg/l	10	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
1,1,2,2-Tetrachloroethane	µg/l	10	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)
Toluene	µg/l	50	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)
trans-1,2-Dichloroethene	µg/l	10	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)
cis-1,2-Dichloroethene	µg/l	10	4.6	3.4	3.5	2.4	2.4	2.8	3.1	3.1	4.1	5.3	5.4	3.5	4.7
1,1,1-Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Xylenes, total	µg/l	10	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)
Vinyl chloride	µg/l	10	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)
Benzene	µg/l	1	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)
Acetone	µg/l	NA	4.1 J	-	-	-	-	ND (3.0)	-	-	-	-	ND (3.0)	-	-
Bromomethane	µg/l	NA	ND (0.87)	-	-	-	-	ND (0.87)	-	-	-	-	ND (0.87)	-	-
2-Butanone (MEK)	µg/l	NA	ND (2.0)	-	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	-	-
Carbon disulfide	µg/l	NA	ND (0.52)	-	-	-	-	ND (0.52)	-	-	-	-	ND (0.52)	-	-
Carbon tetrachloride	µg/l	NA	ND (0.55)	-	-	-	-	ND (0.55)	-	-	-	-	ND (0.55)	-	-
Chloroethane	µg/l	NA	ND (0.54)	-	-	-	-	ND (0.54)	-	-	-	-	ND (0.54)	-	-
Chloromethane	µg/l	NA	ND (0.78)	-	-	-	-	ND (0.78)	-	-	-	-	ND (0.78)	-	-
Cumene	µg/l	NA	ND (0.77)	-	-	-	-	ND (0.77)	-	-	-	-	ND (0.77)	-	-
Cyclohexane	µg/l	NA	ND (0.66)	-	-	-	-	ND (0.66)	-	-	-	-	ND (0.66)	-	-
1,2-Dibromoethane	µg/l	NA	ND (0.28)	-	-	-	-	ND (0.28)	-	-	-	-	ND (0.28)	-	-
1,2-Dibromo-3-chloropropane	µg/l	NA	ND (1.1)	-	-	-	-	ND (1.1)	-	-	-	-	ND (1.1)	-	-
Dichlorodifluoromethane	µg/l	NA	ND (0.69)	-	-	-	-	ND (0.69)	-	-	-	-	ND (0.69)	-	-
1,2-Dichloroethane	µg/l	NA	ND (0.96)	-	-	-	-	ND (0.96)	-	-	-	-	ND (0.96)	-	-
1,2-Dichloropropane	µg/l	NA	ND (0.96)	-	-	-	-	ND (0.96)	-	-	-	-	ND (0.96)	-	-
cis-1,3-Dichloropropene	µg/l	NA	ND (0.47)	-	-	-	-	ND (0.47)	-	-	-	-	ND (0.47)	-	-
trans-1,3-Dichloropropene	µg/l	NA	ND (0.93)	-	-	-	-	ND (0.93)	-	-	-	-	ND (0.93)	-	-
Ethylbenzene	µg/l	NA	ND (0.84)	-	-	-	-	ND (0.84)	-	-	-	-	ND (0.84)	-	-
Freon 113	µg/l	NA	ND (0.87)	-	-	-	-	ND (0.87)	-	-	-	-	ND (0.87)	-	-
2-Hexanone	µg/l	NA	ND (1.8)	-	-	-	-	ND (1.8)	-	-	-	-	ND (1.8)	-	-
Methyl Tert Butyl Ether	µg/l	NA	ND (0.94)	-	-	-	-	ND (0.94)	-	-	-	-	ND (0.94)	-	-
4-Methyl-2-pentanone(MIBK)	µg/l	NA	ND (3.2)	-	-	-	-	ND (3.2)	-	-	-	-	ND (3.2)	-	-
Methyl Acetate	µg/l	NA	ND (0.64)	-	-	-	-	ND (0.64)	-	-	-	-	ND (0.64)	-	-
Methylcyclohexane	µg/l	NA	ND (1.4)	-	-	-	-	ND (1.4)	-	-	-	-	ND (1.4)	-	-
Styrene	µg/l	NA	ND (0.98)	-	-	-	-	ND (0.98)	-	-	-	-	ND (0.98)	-	-
1,2,4-Trichlorobenzene	µg/l	NA	ND (1.0)	-	-	-	-	ND (1.0)	-	-	-	-	ND (1.0)	-	-
1,1,2-Trichloroethane	µg/l	NA	ND (0.41)	-	-	-	-	ND (0.41)	-	-	-	-	ND (0.41)	-	-
Trichlorofluoromethane	µg/l	NA	ND (0.33)	-	-	-	-	ND (0.33)	-	-	-	-	ND (0.33)	-	-

**Bold value is a detected concentration or measurement.**

Table C-1

**SPDES Permit Equivalent Discharge Results - Outfall 01A**  
**Emerson Electric Co.**  
**Ithaca, New York**

Parameter	Units (a)	Discharge Limit (b)	Result (c)										
			7/25/24 (h)	08/15/24	09/12/24	10/29/24	11/1/24 (h)	11/11/24	12/04/24	01/14/25	02/20/25	02/27/24 (h)	03/10/25
Flow	GPD	Monitor	-	12,614 (d); 488 (e)	12,096 (d); 391 (e)	9,792 (d); 307 (e)	-	10,656 (d); 308 (e)	10,944 (d); 474 (e)	10,368 (d); 575 (e)	10,656 (d); 1,203 (e)	-	11,232 (d); 1,543 (e)
pH (range)	SU	6.5 - 8.5	-	8.1	8.0	8.0	-	8.0	8.2	8.4	8.1	-	7.9
Temperature	deg F	Monitor	-	85.5	73.8	70.7	-	67.1	60.8	58.3	58.2	-	58.3
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Sum of Dichlorobenzenes	µg/l	10	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)	ND (1.91)
Bromoform	µg/l	10	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Chlorobenzene	µg/l	5	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)	ND (0.87)
Chlorodibromomethane	µg/l	10	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)	ND (0.98)
Chloroform	µg/l	10	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Free Cyanide	µg/l	Monitor (f)	-	ND (3)	ND (3)	ND (3)	-	ND (0.8)	ND (0.8)	ND (3)	ND (0.8)	-	ND (0.8)
Dichlorobromomethane	µg/l	10	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)	ND (0.94)
1,1-Dichloroethane	µg/l	10	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
1,1-Dichloroethene	µg/l	10	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)
Methylene chloride	µg/l	10	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.80)	ND (0.41)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.41)	ND (0.80)
1,1,2,2-Tetrachloroethane	µg/l	10	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)
Toluene	µg/l	50	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)	ND (0.77)
trans-1,2-Dichloroethene	µg/l	10	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)
cis-1,2-Dichloroethene	µg/l	10	<b>3.6</b>	<b>2.5</b>	<b>4.1</b>	<b>4.0</b>	<b>4.5</b>	<b>3.6</b>	<b>2.7</b>	<b>2.3</b>	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>
1,1,1-Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Xylenes, total	µg/l	10	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)
Vinyl chloride	µg/l	10	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79)
Benzene	µg/l	1	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.71)
Acetone	µg/l	NA	ND (3.0)	-	-	-	ND (3.0)	-	-	-	-	ND (3.0)	-
Bromomethane	µg/l	NA	ND (0.87)	-	-	-	ND (0.87)	-	-	-	-	ND (0.87)	-
2-Butanone (MEK)	µg/l	NA	ND (2.0)	-	-	-	ND (2.0)	-	-	-	-	ND (2.0)	-
Carbon disulfide	µg/l	NA	ND (0.52)	-	-	-	ND (0.52)	-	-	-	-	ND (0.52)	-
Carbon tetrachloride	µg/l	NA	ND (0.55)	-	-	-	ND (0.55)	-	-	-	-	ND (0.55)	-
Chloroethane	µg/l	NA	ND (0.54)	-	-	-	ND (0.54)	-	-	-	-	ND (0.54)	-
Chloromethane	µg/l	NA	ND (0.78)	-	-	-	ND (0.78)	-	-	-	-	ND (0.78)	-
Cumene	µg/l	NA	ND (0.77)	-	-	-	ND (0.77)	-	-	-	-	ND (0.77)	-
Cyclohexane	µg/l	NA	ND (0.66)	-	-	-	ND (0.66)	-	-	-	-	ND (0.66)	-
1,2-Dibromoethane	µg/l	NA	ND (0.28)	-	-	-	ND (0.28)	-	-	-	-	ND (0.28)	-
1,2-Dibromo-3-chloropropane	µg/l	NA	ND (1.1)	-	-	-	ND (1.1)	-	-	-	-	ND (1.1)	-
Dichlorodifluoromethane	µg/l	NA	ND (0.69)	-	-	-	ND (0.69)	-	-	-	-	ND (0.69)	-
1,2-Dichloroethane	µg/l	NA	ND (0.96)	-	-	-	ND (0.96)	-	-	-	-	ND (0.96)	-
1,2-Dichloropropane	µg/l	NA	ND (0.96)	-	-	-	ND (0.96)	-	-	-	-	ND (0.96)	-
cis-1,3-Dichloropropene	µg/l	NA	ND (0.47)	-	-	-	ND (0.47)	-	-	-	-	ND (0.47)	-
trans-1,3-Dichloropropene	µg/l	NA	ND (0.93)	-	-	-	ND (0.93)	-	-	-	-	ND (0.93)	-
Ethylbenzene	µg/l	NA	ND (0.84)	-	-	-	ND (0.84)	-	-	-	-	ND (0.84)	-
Freon 113	µg/l	NA	ND (0.87)	-	-	-	ND (0.87)	-	-	-	-	ND (0.87)	-
2-Hexanone	µg/l	NA	ND (1.8)	-	-	-	ND (1.8)	-	-	-	-	ND (1.8)	-
Methyl Tert Butyl Ether	µg/l	NA	ND (0.94)	-	-	-	ND (0.94)	-	-	-	-	ND (0.94)	-
4-Methyl-2-pentanone(MIBK)	µg/l	NA	ND (3.2)	-	-	-	ND (3.2)	-	-	-	-	ND (3.2)	-
Methyl Acetate	µg/l	NA	ND (0.64)	-	-	-	ND (0.64)	-	-	-	-	ND (0.64)	-
Methylcyclohexane	µg/l	NA	ND (1.4)	-	-	-	ND (1.4)	-	-	-	-	ND (1.4)	-
Styrene	µg/l	NA	ND (0.98)	-	-	-	ND (0.98)	-	-	-	-	ND (0.98)	-
1,2,4-Trichlorobenzene	µg/l	NA	ND (1.0)	-	-	-	ND (1.0)	-	-	-	-	ND (1.0)	-
1,1,2-Trichloroethane	µg/l	NA	ND (0.41)	-	-	-	ND (0.41)	-	-	-	-	ND (0.41)	-
Trichlorofluoromethane	µg/l	NA	ND (0.33)	-	-	-	ND (0.33)	-	-	-	-	ND (0.33)	-

**Bold value is a detected concentration or measurement.**

**Table C-1**

**SPDES Permit Equivalent Discharge Results - Outfall 01A  
Emerson Electric Co.  
Ithaca, New York**

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- a/ GPD = gallons per day; SU = standard units; deg F = degrees Fahrenheit; µg/l= micrograms per liter; NA = not applicable; "-" = parameter not analyzed for.
- b/ Discharge limit specified in Emerson Electric Co. Project Site Remediation Wastewater Discharge SPDES Permit Equivalent, dated August 1, 2022, DER Site ID# 7-55-010.
- c/ ND = not detected above method detection limit provided in parentheses; J = estimated concentration.
- d/ Estimated maximum flow rate during a batch discharge of the groundwater treatment system.  
Because the discharge is not continuous, the actual maximum daily flow rate would be less than this value.
- e/ Estimated average flow based on totalizer readings.
- f/ Per Footnote 1 of SPDES Permit Equivalent, an interim limit of Monitor Only shall apply for free cyanide from August 1, 2022, until July 31, 2025. The water quality-based effluent limit of 5.2 mg/l Monthly Average and 22 mg/l Daily Maximum for free cyanide will become effective on August 1, 2025.
- g/ Sample for free cyanide was collected on August 18, 2023.
- h/ Sample collected as part of routine operation and maintenance of groundwater treatment system.
- i/ Result is considered estimated because sample was analyzed outside of hold time requirements due to instrument failure.



Table C-2

SPDES Permit Equivalent Discharge Results - Outfall 001

Emerson Electric Co.  
Ithaca, New York

Parameter	Units (a)	Discharge Limit (b)	Result (c)															
			09/27/22	10/14/22	11/14/22	12/19/22	01/31/23	02/24/23	03/29/23	04/21/23	05/25/23	06/12/23	07/24/23	08/16/23	09/28/23	10/23/23	11/16/23	11/28/23
Flow (d)	GPD	Monitor	19,065	51,778	51,778	24,099	24,099	29,857	43,666	43,666	43,666	24,099	24,099	43,666	14,772	29,857	5,472	NA
pH (range)	SU	6.5 - 8.5	7.9	8.1	8.0	8.0	7.8	8.1	8.0	7.9	7.8	8.0	7.7	7.9	7.9	8.2	8.6 - 8.7	8.5
Total Barium	µg/l	Monitor	75.9 J	NA	NA	57.1 J	NA	NA	92.2 J	NA	NA	94.9 J	NA	NA	124 J	NA	NA	NA
Total Lead	µg/l	7.4	ND (2.4)	ND (2.4)	ND (2.4)	12.0	6.2	2.5 J	3.7	ND (2.4)	5.0	6.2	ND (2.4)	2.6 J	ND (2.4)	ND (2.4)	3.4	NA
Mercury	ng/l	Monitor	2.4	NA	NA	NA	3.1	NA	3.7 J	NA	NA	3.1 J	NA	NA	2.0 J	NA	NA	NA
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	NA
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	NA
Free Cyanide	µg/l	Monitor (e)	ND (3)	ND (3)	NA	ND (3)	NA	NA	4	NA	NA	4	NA	NA	ND (3)	NA	NA	NA

Parameter	Units (a)	Discharge Limit (b)	Result (c)														
			12/19/23	01/24/24	02/12/24	03/07/24	04/15/24	05/16/24	06/17/24	07/09/24	08/15/24	08/15/24	08/20/24	09/12/24	10/29/24	11/11/24	12/04/24
Flow (d)	GPD	Monitor	24,099	36,369	32,369	24,099	29,857	14,722	19,065	11,033	11,033	NA	NA	12,096	29,857	14,722	11,033
pH (range)	SU	6.5 - 8.5	8.3	7.9	8.1	8.3	8.3	8.1	7.9	8.2	8.7	8.2	8.3	8.1	8.2	8.1	8.1
Total Barium	µg/l	Monitor	75.7 J	NA	NA	75.6 J	NA	NA	173 J	NA	NA	NA	NA	130 J	NA	NA	139 J
Total Lead	µg/l	7.4	ND (2.4)	ND (2.4)	ND (2.4)	3.0	ND (2.4)	ND (1.8)	ND (2.4)	ND (2.4)	ND (2.4)	NA	NA	ND (2.4)	ND (2.4)	ND (2.4)	ND (2.4)
Mercury	ng/l	Monitor	0.20 J	NA	NA	ND (0.15)	NA	NA	0.22 J	NA	NA	NA	NA	2.0	NA	NA	1.4
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	NA	NA	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	NA	NA	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Free Cyanide	µg/l	Monitor (e)	ND (3)	NA	NA	ND (3)	NA	NA	ND (3)	NA	NA	NA	NA	ND (3)	NA	NA	ND (0.8)

Parameter	Units (a)	Discharge Limit (b)	Result (c)		
			01/14/25	02/20/25	03/10/25
Flow (d)	GPD	Monitor	19,066	19,066	14,722
pH (range)	SU	6.5 - 8.5	8.5	8.2	8.1
Total Barium	µg/l	Monitor	NA	NA	138 J
Total Lead	µg/l	7.4	ND (2.4)	ND (2.4)	ND (2.4)
Mercury	ng/l	Monitor	NA	NA	8.3
Tetrachloroethene	µg/l	1	ND (0.41)	ND (0.41)	ND (0.41)
Trichloroethene	µg/l	10	ND (0.43)	ND (0.43)	ND (0.43)
Free Cyanide	µg/l	Monitor (e)	NA	NA	4

Bold value is a detected concentration or measurement.

Orange highlighted value exceeds discharge limit.

a/ GPD = gallons per day; SU = standard units; µg/l= micrograms per liter; ng/l = nanograms per liter.

b/ Discharge limit specified in Emerson Electric Co. Project Site Remediation Wastewater Discharge SPDES Permit Equivalent, dated August 1, 2022, DER Site ID# 7-55-010.

c/ ND = not detected above method detection limit provided in parentheses; J = estimated concentration; NA = not analyzed for this parameter.

(If a duplicate sample was collected, the higher of the two concentrations is reported.)

d/ Estimated based on field measurement and V-notch (triangular) weir calculator (<https://www.lmnoeng.com/Weirs/vweir.php>).

e/ Per Footnote 1 of SPDES Permit Equivalent, an interim limit of Monitor Only shall apply for free cyanide from August 1, 2022, until July 31, 2025. The water quality-based effluent limit of 5.2 µg/l Monthly Average and 22 µg/l Daily Maximum for free cyanide will become effective on August 1, 2025.