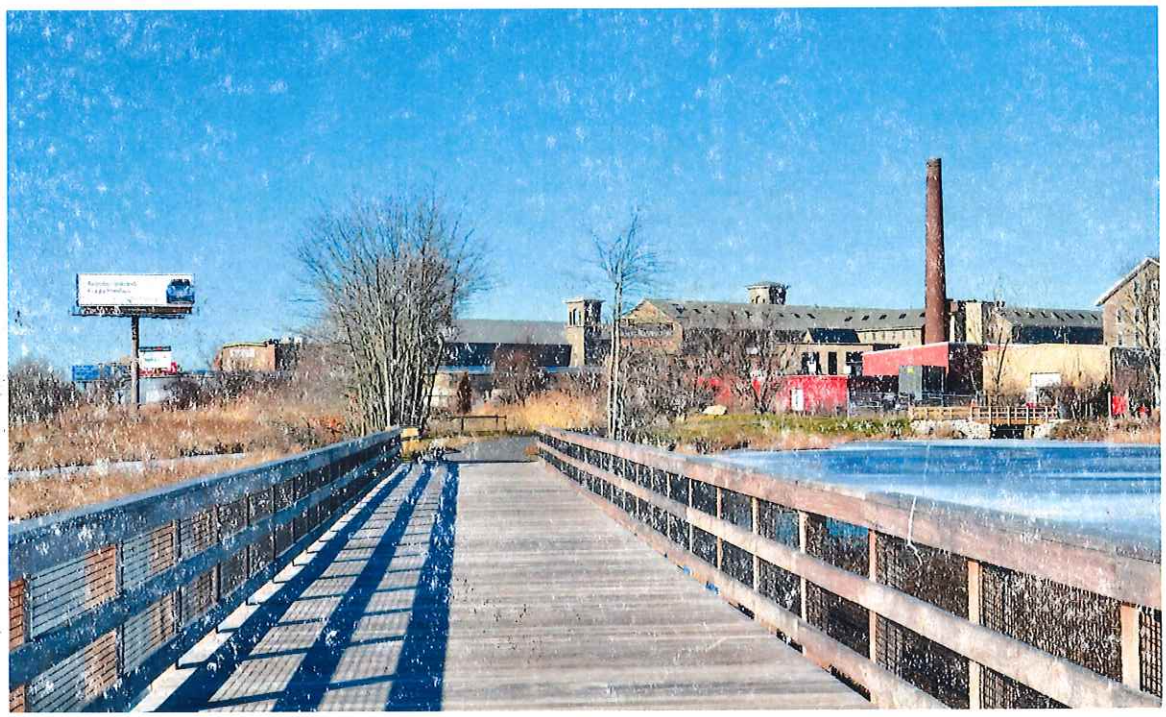
City Of Fall River, Massachusetts

Industrial Pretreatment Program

ANNUAL REPORT

for

FISCAL YEAR 2021



PREPARED BY THE FALL RIVER SEWER COMMISSION

OCTOBER 2021

As Compiled by:
John P. Lincourt, FRSC
w/ Jesselyn A. Dugas, Veolia, NA

City of Fall River
Massachusetts
Department of Community Utilities
WATER • SEWER

PAUL E. COOGAN
Mayor

JOHN LINCOURT
Project Manager

29 October 2021

Mr. Justin Pimpare
Regional Pretreatment Coordinator
EPA New England
5 Post Office Square
Suite 100 OEP 06-03
Boston, MA. 02109

Dear Mr. Pimpare:

The Fall River Sewer Commission respectfully submits the enclosed **Fiscal Year 2021** Industrial Pretreatment Report due annually by **October 31** as per Part E., pages 12-13 of 17 in NPDES Permit No. MA0100382.

If you have any questions, or require further information, please call.

Sincerely,

City of Fall River,
Department of Community Utilities
Water & Sewer

John P. Lincourt
Project Manager

Enclosure:

cc: EPA NPDES Program Operations Section
MA DEP Southeast Regional Office
MA DEP Office of Watershed Mgmt.
IPP File
Veolia

One Government Center • Fall River, MA 02722 • TEL (508) 324-2320
WATER (508)324-2330 • SEWER (508)324-2320 • EMAIL jlincourt@fallriverma.org

THE FALL RIVER INDUSTRIAL PRETREATMENT PROGRAM

ANNUAL REPORT

For

FISCAL YEAR

2021

John P. Lincourt, F.R.S.C.
Project Manager
Jesselyn A. Dugas, FRWWTP,
Veolia, Laboratory Manager

October 29, 2021

EPA Region 1 Annual Pretreatment Report Summary Sheet
FY 2021

POTW Name: Fall River WWTF

NPDES Permit #: MA0100382

Pretreatment Report Period Start Date: 7/1/20

Pretreatment Report Period End Date: 6/30/21

# of Significant Industrial Users (SIUs): 15

# of SIUs Without Control Mechanisms: 0

# of SIUs not Inspected: 0

# of SIUs not Sampled: 0

# of SIUs in Significant Noncompliance (SNC) with Pretreatment Standards: 0

# of SIUs in SNC with Reporting Requirements: 0

# of SIUs in SNC with Pretreatment Compliance Schedule: 0

# of SIUs in SNC Published in Newspaper: 0

# of SIUs with Compliance Schedules: 0

# of Violation Notices Issued to SIUs: 9

# of Administrative Orders Issued to SIUs: 0

# of Civil Suits Filed Against SIUs: 0

# of Criminal Suits Filed Against SIUs: 0

# of Categorical Industrial Users (CIUs): 6

# of CIUs in SNC: 3

Penalties

Total Dollar Amount of Penalties Collected: $0.00

# of IUs from which Penalties have been collected: 0

Local Limits

Date of Most Recent Technical Evaluation of Local Limits: 29 April 2004

Date of Most Recent Adoption of Technically Based Local Limits: No record found.

Pollutant	**Limit (mg/l)**	**MAIHL (lb/day)** (from evaluation on 4/29/04)
Arsenic	NA	NA
Cadmium	0.3	17.4
Chromium	2.24	128
Copper	0.54	9.9
Cyanide	2.0	NA
Lead	4.0	225
Mercury	NA	NA
Nickel	1.43	81
Silver	0.1	5.75
TSS	NA	NA
Zinc	2.2	134.75

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Section I

SIU List, Sampling & Inspection Dates

SIGNIFICANT INDUSTRIAL USER LIST

AVERAGE FLOW & PRETREATMENT SYSTEMS

#	COMPANY	PERMIT #	CATEGORY	Q (Permit) (1,000gpd)	Pretreatment
1	Ashland Chem(ISP)	17-001	OCPSF*	90	Q,pH,O&G
2	Blount Fine Foods	17-002	Food Processing	200	Q,pH,CO,DAF, S,O&G
3	Bolger+Ohearn	17-003	Textile	1	Q,pH
4	Borden & Remington (Tillotson MH#1 & Bldg 17)	17-004	Rubber/Chemical	42	Q,pH
5	Celldex Theraputic	17-005	Fermentation*	6.65	Q,pH
6	Gold Medal	17-006	Food Processing	40	Q
7	Mass Biologics	750	Research	1.5	Q,pH
8	N.E. Electropolishing	17-008	Metal Finishing*	5	Q,pH,IE
9	Robbins**	17-009	Metal Finishing*	Zero Discharge (6.2)**	E,(Q,pH,FLTP, CO,S)
10	Sherle Wagner	17-010	Metal Finishing*	2	Q,pH,E
11	Spectrum Lighting	740	Metal Finishing*	1.5	Q,pH
12	Stop & Shop	730	Food Processing	45	Q,pH,BR,S
13	Swan Dye & Print	17-011	Textile	704	Q,pH
14	Whirlpool(Am. Dryer)	17-012	Equip. Mfg	20	Q,pH,O&G
15	Canned Heat Brewery	18-001	Brewery	1	pH
16					
17					
18					
19					
20					

Q - Flow Equalization
CO - Coagulation
S - Settling
E - Evaporation
pH - pH Neutralization
FLTP- Filter Press
IE - Ion Exchange
M - Membrane Filtration
BR - Biological Reactor
DAF - Disolved Air Floatation
C - Carbon Filtration
O&G - Oil & Grease Separation

* Catagorical Industry

** This company is authorized to discharge if evaporation system goes down. Prior notification is required before authorized discharge is allowed to begin.

SIU Sampling & Inspections FY'21

	Self Monitoring			FRSC Compliance	
COMPANY	Oct	Apr	Self-Monitoring Dates	FRSC Sampling Date	Inspection Dates
Ashland (ISP) (use their sampler)	x	x	7/14/20, 8/11, 9/1, 10/27, 11/10,12/8, 2/10/21, 3/11, 4/21, 5/17, 6/16	5/17/21	6/18/2021
Blount Fine Foods	x	x	10/13/20, 4/7/21	5/19/21	5/19/2021
Bolger+Ohearn	x	x	10/20/20, 4/13/21, 4/26/21	6/8/21	5/28/21
Borden Remington					5/4/2020
#1 Bldg#17 pH Neut tank	x	x	10/15/20, 3/10/21,6/8/21, 6/10/21	5/12/21	
#2 Bldg#5 Ammonia DI Neut Tank	x	x	10/15/20, 3/15/21	5/12/21	
#3 Bldg#17 pH Bleach Reduction	x	x	10/15/20, 3/1/21	5/10/21	
#4 Bldg#17 Bleach Plant Neut Tank*	--	--	----	----	
Canned Heat Brewery	x	x	1/19/2021, 8/13/21	5/9/21	5/9/2021
Celldex Theraputic	x	x	10/2/20, 4/1/21	6/22-23	6/22/21
GoldMedal	x	x	10/19/20, 4/12/21	6/15-16	6/15/21
Mass Biologics	x	x	9/9/20, 3/31/21	5/6/21	5/6/2021
N.E. Electropolishing	x	x	10/14/20, 4/8/21	5/5/21	5/5/2021
Robbins (Zero Discharge)	Cert	0 Disch	----	----	5/13/2021
Sherle Wagner	x	x	11/12/20, 4/21/21	6/29/21	6/3/2021
Spectrum Lighting	x	x	10/14/2020,	5/25/21	2/17/2021
Stop & Shop	x	x	10/7/20, 4/8/21	7/29/20	8/12/2020
Swan Dye & Print	x	x	10/27/20, 4/13/21	6/9-10	6/4/21
Whirlpool					6/2/2021
#1 Main Discharge	x	x	10/16/20, 4/13/21	6/9/21	
#2 R&D	x	x	10/20/20, 4/14/21	6/9/21	

Section II

Summary of Compliance & Enforcement Activities

SECTION II

A SUMMARY OF COMPLIANCE & ENFORCEMENT ACTIVITIES FOR FISCAL YEAR 2021

(A) Compliance Schedules Issued:

There were **no** compliance schedules issued.

(B) Written Notices of Violation Issued in Fiscal 2021:

9 Notices of Violation Issued
(See Attached Table.)

(C) Administrative Orders Issued:

There were **no** Administrative Orders issued.

(D) Criminal or Civil Suits Filed:

There were **no** Criminal or Civil Suits filed.

(E) Administrative Fines/Penalties Issued:

Administrative Fine/Penalty of 0 was issued and collected.

WRITTEN NOTICES OF VIOLATIONS ISSUED TO SIU's

FY 2021

Company	Month	Violation(s)	Response
Blount Seafood	Dec 2020	O&G	Yes
Spectrum Lighting	Dec	REPORTING	Yes
Celdex	Dec	pH	Yes
Canned Heat Brewing	Dec	pH	Yes
Spectrum Lighting	Mar	REPORTING	Yes
Bolger & Ohern	May	COPPER	Yes
Borden Remington	May	NICKEL	Yes
Sherle Wagner	Jun	pH	Yes
S & S Freetown	Jun	TSS	Yes
Total NOV's =	9		

Section III

SIU's Found to be in Significant Non-Compliance

SECTION III

SIU'S FOUND TO BE IN SIGNIFICANT NON-COMPLIANCE

For

FISCAL YEAR 2021

Attached are the:

1) Public Notice for FY 2021 SNC scheduled to be published in December 2021.

2) FY 2021 SNC review list;

City of Fall River
Massachusetts
Department of Community Utilities
WATER • SEWER

PAUL E. COOGAN
Mayor

MEMO

JOHN LINCOURT
Project Manager

To: Paul J. Ferland
Administrator of Community Utilities

From: John P. Lincourt
Project Manager

Date: October 29, 2021

RE: Publication of Industries found to be
Significant Non-Compliance for Fiscal Year 2021

Each year, the City is required to publish a Public Notice in the Fall River Herald News in December containing the names of those Fall River industries that have been found to be in Significant Non-Compliance (SNC) as defined by 40 CFR 403.8. The Public Notice is included in the Annual Pretreatment Report submitted to EPA and DEP.

The publication of the industries found to be in SNC is a requirement of 40 CFR 403.8.

This year, there were 3 industries in Significant Non-Compliance, so we will be publishing the required notice. As we are only required to publish the notice if there are users in Significant Non-Compliance, the City did not publish a public notice for last year.

PUBLIC NOTICE

The United States Environmental Protection Agency Regulation 40 CFR 403.8 (f) (2) (vii) requires that the City of Fall River Industrial Pretreatment Program publish a notice identifying all Significant Industrial Users that have been in significant non-compliance with applicable sewer discharge regulations. The following companies were considered in significant non-compliance for the Fiscal Year 2021. The Fall River Sewer Commission is working with these companies to maintain or achieve compliance.

Industry Name	Violation
Sherle Wagner*	pH
Canned Heat Brewery*	Reporting
Spectrum Lighting*	Reporting

* the company has since taken the required steps to bring their facility into full compliance with their permit requirements.

SIGNIFICANT INDUSTRIAL USER LIST:

FY 2021 SNC REVIEW

COMPANY	PERMIT#	CATEGORY	SNC
Ashland Chemical ©	17-001	OCPSF	No
Blount Fine Foods	17-002	Food Processing	No
Bolger & O'Hearn	17-003	Chemical	No
Borden & Remington	17-004	Chemical	No
Canned Heat	18-001	Brewery	Yes
Celldex Theraputic©	17-005	Fermentation	No
Gold Medal Bakery	17-006	Food Processing	No
Mass Biologics	750	Research	No
N.E. Electropolishing ©	17-008	Metal Finishing	No
Robbins Mfg. ©	17-009	Metal Finishing	No
Sherle Wagner ©	17-010	Metal Finishing	Yes
Spectrum Lighting	740	Parts Washing	Yes
Stop & Shop	730	Food Waste Digester	No
Swan Dye & Print	17-011	Textile	No
Whirlpool	17-012	Equip. Mfg.	No

©- Denotes Categorical SIU
SNC Review-

Section IV

Narrative Description of Program Effectiveness and Proposed Changes to the Program

SECTION IV

DESCRIPTION OF: -PROGRAM EFFECTIVENESS
-PERMITS & PROGRAM STATUS
-ANY PROPOSED CHANGES TO THE PROGRAM

Program Effectiveness

The overall program is considered to be very effective. The program has resulted in increased awareness and responsibility by the SIU's. The SIU's have been very cooperative and significant improvements have resulted over the life of the program.

The number and severity of violations by SIU's have stayed low year after year since Robbins completed the installation of their Evaporation system drastically decreased the number of NOV's we sent out. We feel confident that the number and severity of NOV's will continue to stay low going forward.

We only had to issue **9 - NOV's** this FY. These NOV's were the result of minor infractions and were either mitigated before the NOV had been issued or within 30 days of being notified of the violation. Several of the violations were due to employee turnover due to the COVID-19 Pandemic, where the employee taking over the task either was not trained on the equipment or was unaware of the requirements of the permit.

The WWTF had **NO DMR Violations** this year.

The City continues to maintain a high level of POTW NPDES as a result of the IPP Program and improved plant operations.

In **2018**, the City received the **Bronze Anchor Award** from the American Council of Engineering Companies – RI for the **Globe Street Sewer Improvements**. This $3.4M project increased the flow of a section of sewer main by increasing the size from 33" diameter to a 4'x6' box culvert, keeping the lower section of the 33" as the dry weather flow invert. This project ran through one of the city's busiest intersections and eliminated the source of a reoccurring SSO due to increased capacity.

The WWTF consistently won a Silver or Gold Award from AMSA and subsequently from NACWA (National Association of Clean Water Agencies) during the years 2000 thru 2007. We would still qualify for the NACWA Award but no longer belong to the association due to the cost of membership.

Status of SIU Permits

All SIU's continue to have active permits.

Staffing and Funding

Staffing and funding for the Industrial Pretreatment Program remained level for Fiscal Year 2020 and is presently adequate. ***Mr. John Lincourt*** a Project Manager for the Department of Community Utilities is the Industrial Pretreatment Coordinator. In addition to handling the Industrial Pretreatment Program, Mr. Lincourt oversees maintenance, and construction projects within the department of Community Utilities under the direction of ***Mr. Paul J. Ferland*** Administrator of Community Utilities. ***Mrs. Olga Correia,*** provides construction project and financial oversight & ***Ms. Katelyn Gauthier*** provides clerical and administrative assistance. ***Ms. Jesselyn Dugas***, Lab Manager and ***Mr. David Monte*** Lab Technician for Veolia at the Fall River WWTF, provide analytical services and support for sampling. Mr Monte has assisted Mr. Lincourt with industrial sampling. The Wastewater Collections Crew has also assisted Mr. Lincourt with collection of samples when needed. This year, toxicity testing is subcontracted to ***New England Bioassay of Manchester, CT.***. Laboratory analysis for samples collected is conducted by either ***Rhode Island Analytical*** in Warwick, RI ***or Pheonix Labs*** in Manchester, Ct.

As of **July 1, 1997** responsibility for O&M of the collection system was transferred from the Department of Public Works to the Sewer Commission, under the Department of Community Utilities. Under contract operations with *Veolia North America,* the number of collection system personnel has increased from 4 to 12 including 2 new Collection System Supervisor positions.

This staffing level insures that the overall operation, maintenance, and management of the Collection System and the POTW is maintained per NPDES Permit, State and Federal requirements.

Sewer Use Ordinance

Fall River City Ordinance, Chapter 74, Sections 1 through 250, is the instrument from which the Fall River Sewer Commission derives its authority to provide for the operation, maintenance and management of the sewer infrastructure. Modifications and updating to the SUO which was approved by EPA was updated in January 2018.

Enforcement Response Plan

As required by the latest NPDES permit effective February 2001, a revised Enforcement Response Plan was submitted in August 2001 to Region I EPA and MADEP for approval.

Local Limits

The Fall River Sewer Commission submitted a "Reassessment of Technically Based Industrial Discharge Limits" and a "Draft Revised Sewer Use Ordinance" to EPA and DEP in **2004.**

The local limits assessment provides a comparison of recent plant effluent to EPA water quality discharge limits. All effluent concentrations (average and maximum) are less than the currently applicable water quality standards (Gold Book only applies if there is no NPDES Limit). This indicates that existing local limit concentrations are protecting the facility and Mount Hope Bay.

The majority of our plant's toxicity testing has usually not identified problems with effluent water quality. For these reasons, the City is confident that the current limits are adequate and are providing the desired protection of the POTW and the environment.

In order to improve the quality of the receiving waters in our area, the City of Fall River sewer rate payers have spent in excess of ***$200,000,000*** to date on the CSO ABATEMENT PROGRAM and other upgrades.

An additional ***$123,000,000*** *(Approved by voters in November 2017)* will be spent over the next 5 years in accordance with the ***Integrated Stormwater and Sewer Master Plan*** (January 2016), and the ***Fall River Wastewater Treatment Facility Facilities Plan*** published in (July 2018) and the ***CSO Facilities Plan***. Projects already under construction using the $123M Bond include:

> ***Hyacinth St Drainage Improvements*** ($1.26M) – Engineer Wright Pierce, Contractor CN Corp.
> Misc drainage improvements along Hyacinth Street. This project was completed in the spring of 2020.
>
> ***President Ave Pumping Station*** ($3.8M) - Engineer Wright Pierce, Contractor: D & C Construction Inc.
> Construction of a new Pumping station and demo of existing station. This project was completed in the spring of 2021.
>
> ***Contract 1, WWTF***; $22.8M – Engineer CDM Smith, Contractor WES.
> Extensive electrical work within the WWTF on Bay St, including new main

service and feeds to major facility areas, new generator, new SCADA feeds from all plant areas, temporary control room, demo of the incinerator building and major renovations in the dewatering building, installation of long term resident engineer's modular buildings and other miscellaneous construction. This contract is on track to be completed by the fall of 2021.

South End Pumping Station ($3.9M) - Engineer Wright Pierce, Contractor: Hart Engineering.
Construction of a new Pumping station and demo of existing station. This project is currently under construction and is on track to be completed in the fall of 2021.

Contract 2, WWTF; $45.1M – Engineer CDM Smith, Contractor Daniel O'Connell's & Sons. Extensive upgrades to the solids handling processes at the WWTF on Bay St including process upgrades to the thickening, dewatering, sludge storage and odor control systems of the solids processing facilities. A new building will be constructed as an expansion of the existing Solids Handling Building where prior demolition of the incinerator was completed in a prior contract. Work on the existing Administration Building consists of renovations to include offices, restrooms, a lunchroom and a training/conference room.

The City is also making other improvements to the quality of the receiving waters through improved maintenance & monitoring of the Stormwater System in accordance with our MS4 NPDES Permit requirements.

In the spring of 2021, the City hired a foreman and 2 laborers for a GREEN crew. The focus of this crew's activities is to maintain the green infrastructure, swales, and property maintenance on water and sewer department properties.

It should be noted here that in accordance with EPA approval in March 2005, the City changed overly prohibitive discharge limits for TSS and pH. Both were able to be increased without harming the POTW process or the environment. The TSS limit has been increased to 350 mg/L from 250 mg/L and the upper limit of pH has been revised to 11.5 S.U. from 10.5 S.U.

Section V

Summary of all Pollutant Analytical Results for Influent, Effluent, Sludge & Toxicity Comparison of Influent Results vs Threshold Inhibitory Concentrations vs Ambient Water Quality Standards

SECTION V

A SUMMARY OF ALL POLLUTANT ANALYTICAL RESULTS FOR INFLUENT, EFFLUENT, SLUDGE, AND TOXICITY, INCLUDING A COMPARISON OF INFLUENT RESULTS VS. AMBIENT WATER QUALITY STANDARDS

The following analytical results for Fiscal Year 2021 are attached:

1) Executive Summaries from New England Bioassay's (NEB's) quarterly bioassays.

2) Summary of analytical chemistry (influent & effluent) from NEB's quarterly testing.

3) Monthly testing results (influent & effluent) for Copper, Lead, BOD, & TSS.

4) Bi-monthly sludge analytical data.

The Table below delineates the Threshold Inhibition Concentration and Water Quality Standards as projected for the Fall River POTW.

Discussions on pass-through and interference are in Section VI.

Parameter	Threshold Inhibitory Concentration *** ug/L	Water Quality Standard ug/L **
Cadmium	1,000	53
Chromium	1,000	284
Copper	1,000	22
Lead	5,000	32 (acute =794)
Mercury	100	14 (acute= 12)
Nickel	1,000	47
Silver	250	13
Zinc	5,000	488*(NA)
Cyanide	100	5.7
Arsenic	100	204

** Data obtained by multiplying dilution factor (5.67) times EPA Ambient Water Quality Criteria (lowest value of acute or chronic criteria used unless otherwise noted).

*** Data extracted from EPA Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program.

Part 1

Report, Datasheets and Stats for Mount Hope Bay as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 148

Test Month/Year: September 2020

NEB Proj # 05.0045896.00

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 9/13-14/20 #2 9/15-16/20 #3 9/17-18/20

Test Start Date: *M.beryllina* 9/15/20 *A.punctulata* 9/15/20

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	100%	>100%	>100%	≥ 18%	Pass
Arbacia Punctulata	100%*	>100*	>100*	≥ 18%	Pass

Data Qualifiers affecting this test:

This test had an anomalous result. See "Results Discussion" on Test Results page for explanation.

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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Part 2

Report, Datasheets and Stats for Artificial Saltwater as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 148

Test Month/Year: September 2020

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 9/13-14/20 #2 9/15-16/20 #3 9/17-18/20

Test Start Date: *M.beryllina* 9/15/20 *A.punctulata* 9/15/20

Results Summary

Your results were as follows:

Fail - Please proceed according to the instructions in your permit

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	59.1%	50%	≥ 100%	Fail

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	50%	>50%	62.5%	≥ 18%	Pass
Arbacia Punctulata	100%*	>100%*	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		09/14/20	2:00
Location Code:	NEB	Received by:	SW	09/14/20	16:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22803				

Laboratory Data

SDG ID: GCG76726
Phoenix ID: CG76726

Project ID: FALL RIVER
Client ID: EFF COMPOSITE C40-3613

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	09/16/20	EK	E200.7
Aluminum	0.040	0.010	mg/L	1	09/16/20	EK	E200.7
Arsenic	< 0.002	0.002	mg/L	1	09/16/20	EK	E200.7
Cadmium	< 0.0001	0.0001	mg/L	1	09/16/20	CPP	SM3113B
Chromium	0.001	0.001	mg/L	1	09/16/20	EK	E200.7
Copper	0.0076	0.0010	mg/L	1	09/16/20	EK	E200.7
Copper (Dissolved)	< 0.005	0.005	mg/L	1	09/16/20	CPP	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	09/16/20	MGH	E245.1
Nickel	0.002	0.001	mg/L	1	09/16/20	EK	E200.7
Lead	0.0010	0.0003	mg/L	1	09/16/20	CPP	SM3113B
Zinc	0.020	0.002	mg/L	1	09/16/20	EK	E200.7
Chlorine Residual	< 0.02	0.02	mg/L	1	09/14/20 18:24	O	SM4500CLG-97
C.O.D.	70	10	mg/L	1	09/15/20	QH	SM 5220D-11
Ammonia as Nitrogen	21.1	0.25	mg/L	5	09/17/20	KDB	E350.1
Nitrite-N	0.595	0.050	mg/L	5	09/14/20 19:21	TB	E353.2
Nitrate-N	0.41	0.10	mg/L	5	09/14/20 19:21	TB	E353.2
pH	7.83	1.00	pH Units	1	09/15/20 11:17	AP/KDB	SM4500-H B-11
Salinity	1.8	0.5	ppt	1	09/15/20	AP	SM2520B-10
Nitrogen Tot Kjeldahl	24.7	0.50	mg/L	5	09/17/20	KDB	E351.1
Tot. Org. Carbon	18.1	1.0	mg/L	2	09/15/20	ARG/BJA	SM5310B-11
Total Nitrogen	25.7	0.10	mg/L	1	09/17/20	HG	SM4500NH3/E300.0-11
Phosphorus, as P	2.85	0.050	mg/L	5	09/17/20	EG	SM4500PE-11
Total Suspended Solids	5.3	3.3	mg/L	0.7	09/16/20	ARG	SM 2540D-11
Total Solids	1700	40	mg/L	4	09/15/20	EP/ARG	SM2540B-11
Filtration	Completed				09/15/20	AG	0.45um Filter
Mercury Digestion	Completed				09/16/20	VT/AW	E245.1
Dissolved Metals Preparation	Completed				09/15/20	AG	SW3005A
Total Metals Digestion	Completed				09/15/20	AG	

Ver 1

Project ID: FALL RIVER

Client ID: EFF COMPOSITE C40-3613

Phoenix I.D.: CG76726

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

September 22, 2020

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		09/14/20	
Location Code:	NEB	Received by:	SW	09/14/20	16:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22803				

Laboratory Data

SDG ID: GCG76726
Phoenix ID: CG76727

Project ID: FALL RIVER
Client ID: EFF GRAB C40-3613

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	0.023		0.010		mg/L	1	09/18/20	O/GD	E335.4
Acrolein, Acrylonitrile, 2 CEVE									
2-Chloroethyl vinyl ether	ND		5.0	5.0	ug/L	1	09/15/20	HM	E624.1 As is
Acrolein	ND		5.0	1.0	ug/L	1	09/15/20	HM	E624.1 As is
Acrylonitrile	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1 As is
Volatiles									
1,1,1-Trichloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1,2,2-tetrachloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1-Dichloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1-Dichloroethene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichlorobenzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichloropropane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,3-Dichlorobenzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,3-Dichloropropene	ND		5.0	5.0	ug/L	1	09/15/20	HM	E624.1
1,4-Dichlorobenzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Benzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromodichloromethane	0.66	J	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromoform	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromomethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Carbon tetrachloride	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chlorobenzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloroethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloroform	2.2	J	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloromethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1

Project ID: FALL RIVER
Client ID: EFF GRAB C40-3613

Phoenix I.D.: CG76727

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Dibromochloromethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Ethylbenzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
m&p-Xylenes	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Methyl t-butyl ether (MTBE)	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Methylene chloride	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
o-Xylene	ND	5.0	0.45	ug/L	1	09/15/20	HM	E624.1
Tetrachloroethene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Toluene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Total Xylenes	ND	5.0	5.0	ug/L	1	09/15/20	HM	E624.1
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Trichloroethene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Trichlorofluoromethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Vinyl chloride	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	98			%	1	09/15/20	HM	70 - 130 %
% Bromofluorobenzene	101			%	1	09/15/20	HM	70 - 130 %
% Dibromofluoromethane	99			%	1	09/15/20	HM	70 - 130 %
% Toluene-d8	103			%	1	09/15/20	HM	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
September 22, 2020
Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		09/13/20	17:00
Location Code:	NEB	Received by:	SW	09/14/20	16:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22803				

Laboratory Data

SDG ID: GCG76726
Phoenix ID: CG76728

Project ID: FALL RIVER
Client ID: INFLUENT COMP C40-3611

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	09/16/20	EK	E200.7
Aluminum	0.496	0.010	mg/L	1	09/16/20	EK	E200.7
Arsenic	0.003	0.002	mg/L	1	09/16/20	EK	E200.7
Cadmium	0.0001	0.0001	mg/L	1	09/16/20	CPP	SM3113B
Chromium	0.002	0.001	mg/L	1	09/16/20	EK	E200.7
Copper	0.0375	0.0010	mg/L	1	09/16/20	EK	E200.7
Copper (Dissolved)	0.007	0.005	mg/L	1	09/16/20	CPP	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	09/16/20	MGH	E245.1
Nickel	0.002	0.001	mg/L	1	09/16/20	EK	E200.7
Lead	0.0010	0.0003	mg/L	1	09/16/20	CPP	SM3113B
Zinc	0.060	0.002	mg/L	1	09/16/20	EK	E200.7
Chlorine Residual	< 0.02	0.02	mg/L	1	09/14/20 18:24	O	SM4500CLG-97
C.O.D.	452	10	mg/L	1	09/15/20	QH	SM 5220D-11
Ammonia as Nitrogen	28.5	0.50	mg/L	10	09/17/20	KDB	E350.1
Nitrite-N	< 0.010	0.010	mg/L	1	09/14/20 19:29	TB	E353.2
Nitrate-N	< 0.02	0.02	mg/L	1	09/14/20 19:29	TB	E353.2
pH	7.75	1.00	pH Units	1	09/15/20 11:24	AP/KDB	SM4500-H B-11
Salinity	3.8	0.5	ppt	1	09/15/20	AP	SM2520B-10
Nitrogen Tot Kjeldahl	38.8	1.00	mg/L	10	09/17/20	KDB	E351.1
Tot. Org. Carbon	49.5	2.5	mg/L	5	09/15/20	ARG/BJA	SM5310B-11
Total Nitrogen	38.8	0.10	mg/L	1	09/17/20	HG	SM4500NH3/E300.0-11
Phosphorus, as P	3.48	0.050	mg/L	5	09/17/20	EG	SM4500PE-11
Total Suspended Solids	130	9.1	mg/L	1.8	09/16/20	ARG	SM 2540D-11
Total Solids	3400	67	mg/L	6.7	09/15/20	EP/ARG	SM2540B-11
Filtration	Completed				09/15/20	AG	0.45um Filter
Mercury Digestion	Completed				09/16/20	VT/AW	E245.1
Dissolved Metals Preparation	Completed				09/15/20	AG	SW3005A
Total Metals Digestion	Completed				09/15/20	AG	

Ver 1

Project ID: FALL RIVER

Client ID: INFLUENT COMP C40-3611

Phoenix I.D.: CG76728

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

September 22, 2020

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		09/14/20	
Location Code:	NEB	Received by:	SW	09/14/20	16:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22803				

Laboratory Data

SDG ID: GCG76726
Phoenix ID: CG76729

Project ID: FALL RIVER
Client ID: INFLUENT GRAB C40-3611

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	< 0.010	0.010		mg/L	1	09/18/20	O/GD	E335.4
Acrolein, Acrylonitrile, 2 CEVE								
2-Chloroethyl vinyl ether	ND	5.0	5.0	ug/L	1	09/15/20	HM	E624.1 As is
Acrolein	ND	5.0	1.0	ug/L	1	09/15/20	HM	E624.1 As is
Acrylonitrile	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1 As is
Volatiles								
1,1,1-Trichloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1,2,2-tetrachloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1,2-Trichloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1-Dichloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,1-Dichloroethene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,2-Dichloropropane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,3-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
1,3-Dichloropropene	ND	5.0	5.0	ug/L	1	09/15/20	HM	E624.1
1,4-Dichlorobenzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Benzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromodichloromethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromoform	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Bromomethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Carbon tetrachloride	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chlorobenzene	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloroethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloroform	1.1 J	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Chloromethane	ND	5.0	0.50	ug/L	1	09/15/20	HM	E624.1

Project ID: FALL RIVER

Client ID: INFLUENT GRAB C40-3611

Phoenix I.D.: CG76729

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Dibromochloromethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Ethylbenzene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
m&p-Xylenes	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Methylene chloride	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
o-Xylene	ND		5.0	0.45	ug/L	1	09/15/20	HM	E624.1
Tetrachloroethene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Toluene	0.81	J	5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Total Xylenes	ND		5.0	5.0	ug/L	1	09/15/20	HM	E624.1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Trichloroethene	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
Vinyl chloride	ND		5.0	0.50	ug/L	1	09/15/20	HM	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	98				%	1	09/15/20	HM	70 - 130 %
% Bromofluorobenzene	99				%	1	09/15/20	HM	70 - 130 %
% Dibromofluoromethane	102				%	1	09/15/20	HM	70 - 130 %
% Toluene-d8	101				%	1	09/15/20	HM	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
September 22, 2020
Reviewed and Released by: Helen Geoghegan, Project Manager

Part 1

Report, Datasheets and Stats for Mount Hope Bay as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 149

Test Month/Year: December 2020

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 12/13-14/20 #2 12/15-16/20 #3 12/17-18/20

Test Start Date: *M.beryllina* 12/15/20 *A.punctulata* 12/15/20

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	100%	>100%	>100%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

The Arbacia punctulata test had an anomalous result. See "Results Discussion" on Test Results page for explanation.

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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Part 2

Report, Datasheets and Stats for Artificial Saltwater as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 149

Test Month/Year: December 2020

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 12/13-14/20 #2 12/15-16/20 #3 12/17-18/20

Test Start Date: *M.beryllina* 12/15/20 *A.punctulata* 12/15/20

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	100%	>100%	>100%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

The Arbacia punctulata test had an anomalous result. See "Results Discussion" on Test Results page for explanation.

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		12/14/20	2:00
Location Code:	NEB	Received by:	B	12/14/20	16:24
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22869				

Laboratory Data

SDG ID: GCH30983
Phoenix ID: CH30983

Project ID: FALL RIVER
Client ID: EFF COMPOSITE C40-4654

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	12/16/20	TH	E200.7
Aluminum	0.040	0.010	mg/L	1	12/16/20	TH	E200.7
Arsenic	< 0.002	0.002	mg/L	1	12/16/20	TH	E200.7
Cadmium	< 0.0001	0.0001	mg/L	1	12/18/20	CPP	SM3113B
Chromium	< 0.001	0.001	mg/L	1	12/16/20	TH	E200.7
Copper	0.0073	0.0010	mg/L	1	12/16/20	TH	E200.7
Copper (Dissolved)	0.006	0.005	mg/L	1	12/18/20	CPP	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	12/15/20	RS	E245.1
Nickel	0.005	0.001	mg/L	1	12/16/20	TH	E200.7
Lead	0.0003	0.0003	mg/L	1	12/16/20	RS	SM3113B
Zinc	0.033	0.002	mg/L	1	12/16/20	TH	E200.7
Chlorine Residual	< 0.02	0.02	mg/L	1	12/14/20 20:22	MW	SM4500CLG-97
C.O.D.	38	10	mg/L	1	12/16/20	QH	SM 5220D-11
Ammonia as Nitrogen	9.56	0.10	mg/L	2	12/22/20	KDB	E350.1
Nitrite-N	0.213	0.010	mg/L	1	12/14/20 19:13	TB	E353.2
Nitrate-N	0.88	0.02	mg/L	1	12/14/20 19:13	TB	E353.2
pH	7.42	1.00	pH Units	1	12/14/20 20:09	AP	SM4500-H B-11
Salinity	0.8	0.5	ppt	1	12/15/20	AP	SM2520B-10
Nitrogen Tot Kjeldahl	11.1	0.20	mg/L	2	12/22/20	KDB	E351.1
Tot. Org. Carbon	9.83	0.50	mg/L	1	12/18/20	ARG	SM5310B-11
Total Nitrogen	12.2	0.10	mg/L	1	12/22/20	HG	SM4500NH3/E300.0-11
Phosphorus, as P	0.276	0.010	mg/L	1	12/15/20	JR	SM4500PE-11
Total Suspended Solids	< 3.3	3.3	mg/L	0.7	12/15/20	ARG	SM 2540D-11
Total Solids	860	20	mg/L	2	12/15/20	LS/QH	SM2540B-11
Filtration	Completed				12/15/20	AG	0.45um Filter
Mercury Digestion	Completed				12/15/20	ARW/CG	E245.1
Dissolved Metals Preparation	Completed				12/15/20	AG	SW3005A
Total Metals Digestion	Completed				12/15/20	AG	

Ver 1

Project ID: FALL RIVER

Client ID: EFF COMPOSITE C40-4654

Phoenix I.D.: CH30983

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

December 22, 2020

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		12/14/20	7:40
Location Code:	NEB	Received by:	B	12/14/20	16:24
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22869				

Laboratory Data

SDG ID: GCH30983
Phoenix ID: CH30984

Project ID: FALL RIVER
Client ID: EFF GRAB

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	< 0.010	0.010		mg/L	1	12/16/20	LS	E335.4
Acrolein, Acrylonitrile, 2 CEVE								
2-Chloroethyl vinyl ether	ND	5.0	5.0	ug/L	1	12/14/20	MH	E624.1 As is
Acrolein	ND	5.0	1.0	ug/L	1	12/14/20	MH	E624.1 As is
Acrylonitrile	ND	5.0	0.50	ug/L	1	12/14/20	MH	E624.1 As is
Volatiles								
1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Benzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromodichloromethane	0.34 J	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromoform	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromomethane	ND	0.50	0.50	ug/L	1	12/14/20	MH	E624.1
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloroform	1.4	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1

Project ID: FALL RIVER
Client ID: EFF GRAB

Phoenix I.D.: CH30984

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/14/20	MH	E624.1
Dibromochloromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Ethylbenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
m&p-Xylene	ND	0.50	0.42	ug/L	1	12/14/20	MH	E624.1
Methyl tert-butyl ether (MTBE)	ND	1.0	0.50	ug/L	1	12/14/20	MH	E624.1
Methylene chloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Naphthalene	ND	1.0	1.0	ug/L	1	12/14/20	MH	E624.1
o-Xylene	ND	0.50	0.45	ug/L	1	12/14/20	MH	E624.1
Tetrachloroethene	0.30 J	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Toluene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
trans-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/14/20	MH	E624.1
Trichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Vinyl chloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	104			%	1	12/14/20	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	12/14/20	MH	70 - 130 %
% Dibromofluoromethane	103			%	1	12/14/20	MH	70 - 130 %
% Toluene-d8	100			%	1	12/14/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
December 22, 2020
Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		12/13/20	17:00
Location Code:	NEB	Received by:	B	12/14/20	16:24
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22869				

Laboratory Data

SDG ID: GCH30983
Phoenix ID: CH30985

Project ID: FALL RIVER
Client ID: INFLUENT COMPOSITE C40-4656

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	12/16/20	TH	E200.7
Aluminum	0.196	0.010	mg/L	1	12/16/20	TH	E200.7
Arsenic	< 0.002	0.002	mg/L	1	12/16/20	TH	E200.7
Cadmium	0.0001	0.0001	mg/L	1	12/18/20	CPP	SM3113B
Chromium	0.001	0.001	mg/L	1	12/16/20	TH	E200.7
Copper	0.0240	0.0010	mg/L	1	12/16/20	TH	E200.7
Copper (Dissolved)	0.011	0.005	mg/L	1	12/18/20	CPP	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	12/15/20	RS	E245.1
Nickel	0.003	0.001	mg/L	1	12/16/20	TH	E200.7
Lead	0.0021	0.0003	mg/L	1	12/16/20	RS	SM3113B
Zinc	0.055	0.002	mg/L	1	12/16/20	TH	E200.7
Chlorine Residual	< 0.02	0.02	mg/L	1	12/14/20 20:13	MW	SM4500CLG-97
C.O.D.	205	10	mg/L	1	12/16/20	QH	SM 5220D-11
Ammonia as Nitrogen	13.1	0.50	mg/L	10	12/22/20	KDB	E350.1
Nitrite-N	0.418	0.010	mg/L	1	12/14/20 19:14	TB	E353.2
Nitrate-N	0.09	0.02	mg/L	1	12/14/20 19:14	TB	E353.2
pH	7.55	1.00	pH Units	1	12/14/20 20:12	AP	SM4500-H B-11
Salinity	0.6	0.5	ppt	1	12/15/20	AP	SM2520B-10
Nitrogen Tot Kjeldahl	20.3	1.00	mg/L	10	12/22/20	KDB	E351.1
Tot. Org. Carbon	34.1	2.5	mg/L	5	12/18/20	ARG	SM5310B-11
Total Nitrogen	20.8	0.10	mg/L	1	12/22/20	HG	SM4500NH3/E300.0-11
Phosphorus, as P	1.59	0.10	mg/L	10	12/15/20	JR	SM4500PE-11
Total Suspended Solids	40	8.3	mg/L	1.7	12/15/20	ARG	SM 2540D-11
Total Solids	630	20	mg/L	2	12/15/20	LS/QH	SM2540B-11
Filtration	Completed				12/15/20	AG	0.45um Filter
Mercury Digestion	Completed				12/15/20	ARW/CG	E245.1
Dissolved Metals Preparation	Completed				12/15/20	AG	SW3005A
Total Metals Digestion	Completed				12/15/20	AG	

Project ID: FALL RIVER

Client ID: INFLUENT COMPOSITE C40-4656

Phoenix I.D.: CH30985

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

December 22, 2020

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 22, 2020

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		12/14/20	7:40
Location Code:	NEB	Received by:	B	12/14/20	16:24
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22869				

Laboratory Data

SDG ID: GCH30983
Phoenix ID: CH30986

Project ID: FALL RIVER
Client ID: INFLUENT GRAB

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	< 0.010	0.010		mg/L	1	12/16/20	LS	E335.4
Acrolein, Acrylonitrile, 2 CEVE								
2-Chloroethyl vinyl ether	ND	5.0	5.0	ug/L	1	12/14/20	MH	E624.1 As is
Acrolein	ND	5.0	1.0	ug/L	1	12/14/20	MH	E624.1 As is
Acrylonitrile	ND	5.0	0.50	ug/L	1	12/14/20	MH	E624.1 As is
Volatiles								
1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Benzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromodichloromethane	0.31 J	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromoform	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Bromomethane	ND	0.50	0.50	ug/L	1	12/14/20	MH	E624.1
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chlorobenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloroethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloroform	1.5	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Chloromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1

Project ID: FALL RIVER
Client ID: INFLUENT GRAB

Phoenix I.D.: CH30986

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/14/20	MH	E624.1
Dibromochloromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Ethylbenzene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
m&p-Xylene	ND	0.50	0.42	ug/L	1	12/14/20	MH	E624.1
Methyl tert-butyl ether (MTBE)	ND	1.0	0.50	ug/L	1	12/14/20	MH	E624.1
Methylene chloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Naphthalene	ND	1.0	1.0	ug/L	1	12/14/20	MH	E624.1
o-Xylene	ND	0.50	0.45	ug/L	1	12/14/20	MH	E624.1
Tetrachloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Toluene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
trans-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	12/14/20	MH	E624.1
Trichloroethene	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
Vinyl chloride	ND	0.50	0.25	ug/L	1	12/14/20	MH	E624.1
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	100			%	1	12/14/20	MH	70 - 130 %
% Bromofluorobenzene	99			%	1	12/14/20	MH	70 - 130 %
% Dibromofluoromethane	102			%	1	12/14/20	MH	70 - 130 %
% Toluene-d8	99			%	1	12/14/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller

Phyllis Shiller, Laboratory Director
December 22, 2020
Reviewed and Released by: Helen Geoghegan, Project Manager

Part 1

Report, Datasheets and Stats for Mount Hope Bay as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 150

Test Month/Year: March 2021

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 3/14-15/21 #2 3/16-17/21 #3 3/18-19/21

Test Start Date: *M.beryllina* 3/16/21 *A.punctulata* 3/16/21

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	50%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	50%	>50%	71.3%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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Part 2

Report, Datasheets and Stats for Artificial Saltwater as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Effluent

Report Number: 150

Test Month/Year: March 2021

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 3/14-15/21 #2 3/16-17/21 #3 3/18-19/21

Test Start Date: *M.beryllina* 3/16/21 *A.punctulata* 3/16/21

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	50%	>50%	67.0%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 18, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		03/15/21	8:30
Location Code:	NEB	Received by:	SW	03/15/21	15:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22920				

Laboratory Data

SDG ID: GCH78515
Phoenix ID: CH78515

Project ID: FALL RIVER
Client ID: C41-1663 MOUNT HOPE BAY

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chlorine Residual	< 0.02	0.02	mg/L	1	03/15/21 18:01	MW	SM4500CLG-97
Ammonia as Nitrogen	0.42	0.05	mg/L	1	03/17/21	KDB	E350.1
pH	7.99	1.00	pH Units	1	03/15/21 21:36	AP	SM4500-H B-11
Salinity	25.2	0.5	ppt	1	03/15/21	AP	SM2520B-10
Tot. Org. Carbon	3.67	0.50	mg/L	1	03/16/21	BJA	SM5310B-11
Total Suspended Solids	17	3.3	mg/L	0.7	03/16/21	LS	SM 2540D-11
Total Solids	29000	250	mg/L	25	03/17/21	LS	SM2540B-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 18, 2021
Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 18, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		03/15/21	10:11
Location Code:	NEB	Received by:	SW	03/15/21	15:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22920				

Laboratory Data

SDG ID: GCH78515
Phoenix ID: CH78516

Project ID: FALL RIVER
Client ID: C41-1665 LABORATORY SALT WATER

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chlorine Residual	< 0.02	0.02	mg/L	1	03/15/21 18:00	MW	SM4500CLG-97
Ammonia as Nitrogen	< 0.05	0.05	mg/L	1	03/17/21	KDB	E350.1
pH	8.18	1.00	pH Units	1	03/15/21 21:38	AP	SM4500-H B-11
Salinity	25.0	0.5	ppt	1	03/15/21	AP	SM2520B-10
Tot. Org. Carbon	< 0.50	0.50	mg/L	1	03/16/21	BJA	SM5310B-11
Total Suspended Solids	11	3.3	mg/L	0.7	03/16/21	LS	SM 2540D-11
Total Solids	30000	250	mg/L	25	03/17/21	LS	SM2540B-11

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

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Phyllis Shiller, Laboratory Director
March 18, 2021
Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 19, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		03/15/21	2:00
Location Code:	NEB	Received by:	B	03/15/21	15:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22920				

Laboratory Data

SDG ID: GCH78511
Phoenix ID: CH78511

Project ID: FALL RIVER
Client ID: EFF COMPOSITE C41-1662

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	03/16/21	EK	E200.7
Aluminum	0.040	0.010	mg/L	1	03/16/21	EK	E200.7
Arsenic	< 0.002	0.002	mg/L	1	03/16/21	EK	E200.7
Cadmium	< 0.0001	0.0001	mg/L	1	03/17/21	CPP	SM3113B
Chromium	< 0.001	0.001	mg/L	1	03/16/21	EK	E200.7
Copper	0.0055	0.0010	mg/L	1	03/16/21	EK	E200.7
Copper (Dissolved)	0.006	0.005	mg/L	1	03/16/21	CPP	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	03/17/21	MGH	E245.1
Nickel	0.002	0.001	mg/L	1	03/16/21	EK	E200.7
Lead	< 0.0003	0.0003	mg/L	1	03/18/21	CPP	SM3113B
Zinc	0.028	0.002	mg/L	1	03/16/21	EK	E200.7
Chlorine Residual	< 0.02	0.02	mg/L	1	03/15/21 17:52	MW	SM4500CLG-97
C.O.D.	52	10	mg/L	1	03/17/21	QH	SM 5220D-11
Ammonia as Nitrogen	16.3	0.25	mg/L	5	03/17/21	KDB	E350.1
Nitrite-N	0.103	0.010	mg/L	1	03/15/21 19:03	TB	E353.2
Nitrate-N	0.42	0.02	mg/L	1	03/15/21 19:03	TB	E353.2
pH	7.51	1.00	pH Units	1	03/15/21 21:32	AP	SM4500-H B-11
Salinity	0.8	0.5	ppt	1	03/15/21	AP	SM2520B-10
Nitrogen Tot Kjeldahl	17.8	0.50	mg/L	5	03/17/21	KDB	E351.1
Tot. Org. Carbon	13.1	0.50	mg/L	1	03/16/21	BJA	SM5310B-11
Total Nitrogen	18.3	0.10	mg/L	1	03/17/21	HG	SM4500NH3/E300.0-11
Phosphorus, as P	1.24	0.020	mg/L	2	03/16/21	MI	SM4500PE-11
Total Suspended Solids	< 3.3	3.3	mg/L	0.7	03/16/21	LS	SM 2540D-11
Total Solids	590	50	mg/L	5	03/16/21	LS	SM2540B-11
Filtration	Completed				03/15/21	AG	0.45um Filter
Mercury Digestion	Completed				03/16/21	D/D	E245.1
Dissolved Metals Preparation	Completed				03/15/21	AG	SW3005A
Total Metals Digestion	Completed				03/15/21	AG	

Project ID: FALL RIVER

Client ID: EFF COMPOSITE C41-1662

Phoenix I.D.: CH78511

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

March 19, 2021

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 19, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		03/15/21	7:30
Location Code:	NEB	Received by:	B	03/15/21	15:10
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22920				

Laboratory Data

SDG ID: GCH78511
Phoenix ID: CH78512

Project ID: FALL RIVER
Client ID: EFF GRAB

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	< 0.010		0.010		mg/L	1	03/17/21	O/GD	E335.4
Acrolein, Acrylonitrile, 2 CEVE									
2-Chloroethyl vinyl ether	ND		5.0	5.0	ug/L	1	03/17/21	MH	E624.1 As is
Acrolein	ND		5.0	1.0	ug/L	1	03/17/21	MH	E624.1 As is
Acrylonitrile	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1 As is
Volatiles									
1,1,1-Trichloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,1,2,2-tetrachloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,1-Dichloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,1-Dichloroethene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,2-Dichlorobenzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,2-Dichloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,2-Dichloropropane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,3-Dichlorobenzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
1,3-Dichloropropene	ND		5.0	5.0	ug/L	1	03/17/21	MH	E624.1
1,4-Dichlorobenzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Benzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Bromodichloromethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Bromoform	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Bromomethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Carbon tetrachloride	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Chlorobenzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Chloroethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Chloroform	1.9	J	5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Chloromethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1

Project ID: FALL RIVER
Client ID: EFF GRAB

Phoenix I.D.: CH78512

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Dibromochloromethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Ethylbenzene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
m&p-Xylenes	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Methylene chloride	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
o-Xylene	ND		5.0	0.45	ug/L	1	03/17/21	MH	E624.1
Tetrachloroethene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Toluene	0.53	J	5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Total Xylenes	ND		5.0	5.0	ug/L	1	03/17/21	MH	E624.1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Trichloroethene	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
Vinyl chloride	ND		5.0	0.50	ug/L	1	03/17/21	MH	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	1	03/17/21	MH	70 - 130 %
% Bromofluorobenzene	97				%	1	03/17/21	MH	70 - 130 %
% Dibromofluoromethane	98				%	1	03/17/21	MH	70 - 130 %
% Toluene-d8	98				%	1	03/17/21	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
March 19, 2021
Reviewed and Released by: Helen Geoghegan, Project Manager

Part 1
Report, Datasheets and Stats for Mount Hope Bay as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382
Report submitted to: 1979 Bay Street
Fall River MA 02724
Sample ID: Report # 151
Report Number: 151
Test Month/Year: June 2021
NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 6/13-14/21 #2 6/15-16/21 #3 6/17-18/21

Test Start Date: *M.beryllina* 6/15/21 *A.punctulata* 6/17/21

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	50%	100%	>100%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

This report shall not be reproduced, except in its entirety, without approval of NEB. NEB is the sole authority for authorizing edits or modifications to the data contained in this report. NEB holds no responsibility for results and/or data that are not consistent with the original. Please contact the Lab Director, Kimberly Wills, at 860-643-9560 or kimberly.wills@nebio.com if you have questions concerning these results.

Part 2

Report, Datasheets and Stats for Artificial Saltwater as the Dilution Water

Permitee: Fall River WWTP NPDES # MA0100382

Report submitted to: 1979 Bay Street
Fall River MA 02724

Sample ID: Report # 151

Report Number: 151

Test Month/Year: June 2015

NEB Proj # 45896

Test Type / Method: *Menidia beryllina* Modified Chronic Static-Renewal Saltwater
Test Method 1006.0; EPA 821-R-02-014
Arbacia Punctulata Chronic Static Non-Renewal Saltwater
Test Method 1008.0; EPA 821-R-02-014

Effluent Sample Dates: #1 6/13-14/21 #2 6/15-16/21 #3 6/17-18/21

Test Start Date: *M.beryllina* 6/15/21 *A.punctulata* 6/17/21

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

Species	LC50	A-NOEC	Permit Limit	Pass / Fail
Menidia beryllina	>100%	100%	≥ 100%	Pass

Chronic Test Results

Species	C-NOEC	C-LOEC	IC25	Permit Limit	Pass/Fail
Menidia beryllina	100%	>100%	>100%	≥ 18%	Pass
Arbacia Punctulata	100%	>100%	>100%	≥ 18%	Pass

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

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PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/14/21	2:00
Location Code:	NEB	Received by:	LB	06/14/21	15:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22978				

Laboratory Data

SDG ID: GCI54174
Phoenix ID: CI54174

Project ID: FALL RIVER
Client ID: EFF COMPOSITE C41-2594

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001	mg/L	1	06/19/21	CPP	E200.7
Aluminum	< 0.010	0.010	mg/L	1	06/21/21	CPP	E200.7
Arsenic	< 0.002	0.002	mg/L	1	06/19/21	CPP	E200.7
Cadmium	< 0.0001	0.0001	mg/L	1	06/15/21	CPP	SM3113B
Chromium	< 0.001	0.001	mg/L	1	06/19/21	CPP	E200.7
Copper	0.0042	0.0010	mg/L	1	06/19/21	EK	E200.7
Copper (Dissolved)	< 0.005	0.005	mg/L	1	06/16/21	EK	E200.7
Mercury	< 0.0002	0.0002	mg/L	1	06/16/21	AT	E245.1
Nickel	0.002	0.001	mg/L	1	06/19/21	CPP	E200.7
Lead	< 0.0003	0.0003	mg/L	1	06/17/21	TH	SM3113B
Zinc	0.012	0.002	mg/L	1	06/19/21	CPP	E200.7
Chlorine Residual	< 0.011	0.011	mg/L	1	06/14/21 18:29	MW	SM4500CLG-97
C.O.D.	48	10	mg/L	1	06/16/21	QH	SM 5220D-11
Ammonia as Nitrogen	13.4	0.10	mg/L	2	06/17/21	KDB	E350.1
Nitrite-N	0.082	0.010	mg/L	1	06/14/21 19:46	AP	E353.2
Nitrate-N	0.13	0.02	mg/L	1	06/14/21 19:46	AP	E353.2
pH	7.36	1.00	pH Units	1	06/15/21 01:20	MW/EG	SM4500-H B-11
Salinity	1.2	0.5	ppt	1	06/15/21	mm	SM2520B-10
Nitrogen Tot Kjeldahl	15.1	0.20	mg/L	2	06/17/21	KDB	E351.1
Tot. Org. Carbon	12.3	0.50	mg/L	1	06/16/21	BJA	SM5310B-11
Total Nitrogen	15.3	0.10	mg/L	1	06/17/21	HG	SM4500NH3/E300.0-11
Phosphorus, as P	0.634	0.010	mg/L	1	06/17/21	MI	SM4500PE-11
Total Suspended Solids	7.3	3.3	mg/L	0.7	06/15/21	MCH	SM 2540D-11
Total Solids	1200	20	mg/L	2	06/15/21	MCH/QH	SM2540B-11
Filtration	Completed				06/15/21	AG	0.45um Filter
Mercury Digestion	Completed				06/15/21	AB/AB	E245.1
Dissolved Metals Preparation	Completed				06/15/21	AG	SW3005A

Ver 1

Project ID: FALL RIVER

Client ID: EFF COMPOSITE C41-2594

Phoenix I.D.: CI54174

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion	Completed				06/16/21	AG	

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for Chlorine is immediately. This Chlorine was performed in the laboratory and may be considered outside of hold-time.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 22, 2021

Reviewed and Released by: Helen Geoghegan, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 22, 2021

FOR: Attn: Ms. Kim Wills
New England Bioassay
77 Batson Drive
Manchester, CT 06040

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:		06/13/21	2:30
Location Code:	NEB	Received by:	LB	06/14/21	15:41
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	22978				

Laboratory Data

SDG ID: GCI54174
Phoenix ID: CI54175

Project ID: FALL RIVER
Client ID: EFF GRAB

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide	< 0.010		0.010		mg/L	1	06/21/21	A/B/G	E335.4
Acrolein, Acrylonitrile, 2 CEVE									
2-Chloroethyl vinyl ether	ND		5.0	5.0	ug/L	1	06/14/21	MH	E624.1 As is
Acrolein	ND		5.0	1.0	ug/L	1	06/14/21	MH	E624.1 As is
Acrylonitrile	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1 As is
Volatiles									
1,1,1-Trichloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,1,2,2-tetrachloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,1-Dichloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,1-Dichloroethene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,2-Dichlorobenzene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,2-Dichloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,2-Dichloropropane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,3-Dichlorobenzene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
1,3-Dichloropropene	ND		5.0	5.0	ug/L	1	06/14/21	MH	E624.1
1,4-Dichlorobenzene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Benzene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Bromodichloromethane	0.51	J	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Bromoform	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Bromomethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Carbon tetrachloride	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Chlorobenzene	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Chloroethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Chloroform	3.1	J	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Chloromethane	ND		5.0	0.50	ug/L	1	06/14/21	MH	E624.1

Project ID: FALL RIVER
Client ID: EFF GRAB

Phoenix I.D.: CI54175

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Dibromochloromethane	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Ethylbenzene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
m&p-Xylenes	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Methyl t-butyl ether (MTBE)	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Methylene chloride	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
o-Xylene	ND	5.0	0.45	ug/L	1	06/14/21	MH	E624.1
Tetrachloroethene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Toluene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Total Xylenes	ND	5.0	5.0	ug/L	1	06/14/21	MH	E624.1
trans-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
trans-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Trichloroethene	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Trichlorofluoromethane	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
Vinyl chloride	ND	5.0	0.50	ug/L	1	06/14/21	MH	E624.1
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	106			%	1	06/14/21	MH	70 - 130 %
% Bromofluorobenzene	101			%	1	06/14/21	MH	70 - 130 %
% Dibromofluoromethane	107			%	1	06/14/21	MH	70 - 130 %
% Toluene-d8	100			%	1	06/14/21	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level J=Estimated Below RL
LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
June 22, 2021
Reviewed and Released by: Helen Geoghegan, Project Manager

TCLP Aug. 2020

PHOENIX
Environmental Laboratories, Inc.

Wednesday, September 09, 2020

Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Project ID:
SDG ID: GCG70460
Sample ID#s: CG70460

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

September 09, 2020

SDG I.D.: GCG70460

Project ID:

Client Id	Lab Id	Matrix
20-08-27	CG70460	SLUDGE

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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

September 09, 2020

FOR: Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Sample Information		Custody Information		Date	Time
Matrix:	SLUDGE	Collected by:		08/30/20	7:30
Location Code:	VEOLIAFR	Received by:	CP	09/03/20	15:42
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCG70460
Phoenix ID: CG70460

Project ID:
Client ID: 20-08-27

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	1.55	0.53	mg/Kg	1	09/05/20	TH	SW6010D
Arsenic	4.5	1.1	mg/Kg	1	09/05/20	CPP	SW6010D
Barium	167	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Beryllium	< 0.53	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Cadmium	1.92	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Chromium	73.8	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Copper	414	5.3	mg/Kg	10	09/05/20	EK	SW6010D
Mercury	0.89	0.29	mg/kg	5	09/08/20	RS	SW7471B
Nickel	23.9	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Lead	87.4	0.53	mg/Kg	1	09/05/20	CPP	SW6010D
Selenium	4.7	2.7	mg/Kg	1	09/05/20	TH	SW6010D
Zinc	626	5.3	mg/Kg	10	09/05/20	EK	SW6010D
Total Solids @ 104C	20.9	0.1	%	1	09/03/20	AP/EP/BJA	SM2540B-11
Corrosivity	Negative		Pos/Neg	1	09/03/20	MB	SW846-Corr
Fixed Solids @ 500C	26.0	0.1	%	1	09/03/20	AP/EP/BJA	SM2540E MOD-11
pH - Sludge	6.08	1.00	pH Units	1	09/03/20 20:56	MB	SW9045D
Volatile Solids @ 500C	74.0	0.1	%	1	09/03/20	AP/EP/BJA	SM2540E MOD-11
Mercury Digestion	Completed				09/05/20	VT/AW	SW7471B
Paint Filter Test	Passed		PASS/FAIL		09/03/20	B	SW9095B
Sludge Ext. for PCB	Completed				09/03/20	E/E	SW3550C
Total Metals Digest	Completed				09/03/20	B/AG/BF	SW3050B
Polychlorinated Biphenyls							
PCB-1016	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1221	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1232	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1242	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1248	ND	230	ug/Kg	1	09/04/20	SC	SW8082A

Project ID:
Client ID: 20-08-27

Phoenix I.D.: CG70460

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	
PCB-1254	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1260	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1262	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
PCB-1268	ND	230	ug/Kg	1	09/04/20	SC	SW8082A
QA/QC Surrogates							
% DCBP	104		%	1	09/04/20	SC	30 - 150 %
% DCBP (Confirmation)	79		%	1	09/04/20	SC	30 - 150 %
% TCMX	69		%	1	09/04/20	SC	30 - 150 %
% TCMX (Confirmation)	77		%	1	09/04/20	SC	30 - 150 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Corrosivity is based solely on the pH analysis performed above.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
September 09, 2020
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

September 09, 2020

QA/QC Data

SDG I.D.: GCG70460

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 544379 (mg/kg), QC Sample No: CG69878 2X (CG70460)														
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	117	113	3.5	86.8	90.0	3.6	75 - 125	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 75-125%														
QA/QC Batch 544145 (mg/kg), QC Sample No: CG70763 (CG70460)														
ICP Metals - Soil														
Arsenic	BRL	0.67	1.36	0.89	NC	108	101	6.7	102	100	2.0	75 - 125	35	
Barium	BRL	0.33	34.0	40.3	17.0	110	105	4.7	111	105	5.6	75 - 125	35	
Beryllium	BRL	0.27	<0.30	<0.29	NC	113	107	5.5	99.8	97.6	2.2	75 - 125	35	
Cadmium	BRL	0.33	0.53	0.50	NC	112	106	5.5	97.8	96.1	1.8	75 - 125	35	
Chromium	BRL	0.33	7.98	6.91	14.4	105	100	4.9	95.6	94.6	1.1	75 - 125	35	
Copper	BRL	0.67	13.8	13.1	5.20	105	99.9	5.0	106	104	1.9	75 - 125	35	
Lead	BRL	0.33	3.17	2.04	43.4	102	95.5	6.6	100	99.1	0.9	75 - 125	35	r
Nickel	BRL	0.33	5.54	4.83	13.7	115	107	7.2	96.9	95.3	1.7	75 - 125	35	
Selenium	BRL	1.3	<1.5	<1.5	NC	116	111	4.4	105	103	1.9	75 - 125	35	
Silver	BRL	0.33	<0.37	<0.37	NC	103	99.3	3.7	104	103	1.0	75 - 125	35	
Zinc	BRL	0.67	18.4	17.6	4.40	109	102	6.6	99.7	96.9	2.8	75 - 125	35	
Comment:														
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.														

r = This parameter is outside laboratory RPD specified recovery limits.

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

September 09, 2020

QA/QC Data

SDG I.D.: GCG70460

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 544173 (PH), QC Sample No: CG67928 (CG70460)													
pH at 25C - Soil			7.09	7.10	0.10	100						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 544174 (%), QC Sample No: CG69814 (CG70460)													
Total Solids	BRL	0.1	26.6	26.3	1.10	100						75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													

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Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

September 09, 2020

QA/QC Data

SDG I.D.: GCG70460

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 544189 (ug/Kg), QC Sample No: CG63698 (CG70460)										
Polychlorinated Biphenyls - Sludge										
PCB-1016	ND	13	79	80	1.3				40 - 140	30
PCB-1221	ND	13							40 - 140	30
PCB-1232	ND	13							40 - 140	30
PCB-1242	ND	13							40 - 140	30
PCB-1248	ND	13							40 - 140	30
PCB-1254	ND	13							40 - 140	30
PCB-1260	ND	13	92	93	1.1				40 - 140	30
PCB-1262	ND	13							40 - 140	30
PCB-1268	ND	13							40 - 140	30
% DCBP (Surrogate Rec)	113	%	110	108	1.8				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	110	%	108	107	0.9				30 - 150	30
% TCMX (Surrogate Rec)	77	%	77	77	0.0				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	74	%	76	77	1.3				30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
September 09, 2020

Wednesday, September 09, 2020

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCG70460 - VEOLIAFR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

September 09, 2020 SDG I.D.: GCG70460

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [✓] No [ ]
Coolant: IPK [ ] ICE [✓] No [ ]

CHAIN OF CUSTODY RECORD

Temp 7.2 C Pg of

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[X] Email: jesselyn.dugas@veolia.com

Customer: Customer: Veolia FR
Address: Address: 1979 Bay St. Fall River, Ma 02724
Attn: Jesselyn A Dugas
E-mail: Jesselyn.dugas@veolia.com
Phone: (508)672-4530 FAX:(508)679-8241

Project:
Report to:
Invoice to:
Phone #:
Fax #:

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Paint Filter test	RCRA-8 Acids	Table II (Attached)	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
70460	20-08-27	SL	8/30/20	0000-0730	✓	✓	✓		1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	9-3-20	8:30
[signature]	[signature]	9/3	1542

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

4th Quarter TCLP

PHOENIX
Environmental Laboratories, Inc.

Thursday, December 03, 2020

Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Project ID:
SDG ID: GCH19844
Sample ID#s: CH19844

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

December 03, 2020

SDG I.D.: GCH19844

Project ID:

Client Id	Lab Id	Matrix
20-11-29	CH19844	SLUDGE

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 03, 2020

FOR: Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Sample Information		Custody Information		Date	Time
Matrix:	SLUDGE	Collected by:		11/18/20	22:30
Location Code:	VEOLIAFR	Received by:	CP	11/24/20	15:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCH19844
Phoenix ID: CH19844

Project ID:
Client ID: 20-11-29

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.3	1.3	mg/Kg	1	11/28/20	TH	SW6010D
Arsenic	3.6	1.0	mg/Kg	1	11/28/20	CPP	SW6010D
Barium	142	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Beryllium	< 0.52	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Cadmium	1.46	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Chromium	30.1	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Copper	334	5.2	mg/Kg	10	11/28/20	CPP	SW6010D
Mercury	< 0.38	0.38	mg/kg	5	11/25/20	RS	SW7471B
Nickel	11.3	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Lead	70.5	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Selenium	< 3.0	3.0	mg/Kg	1	11/28/20	TH	SW6010D
Zinc	515	0.52	mg/Kg	1	11/28/20	CPP	SW6010D
Total Solids @ 104C	17.2	0.1	%	1	11/24/20	TB/QH	SM2540B-11
Corrosivity	Negative		Pos/Neg	1	11/24/20	MW/MB	SW846-Corr
Fixed Solids @ 500C	19.3	0.1	%	1	11/24/20	TB/QH	SM2540E MOD-11
pH - Sludge	5.79	1.00	pH Units	1	11/24/20 23:34	MW/MB	SW9045D
Volatile Solids @ 500C	80.7	0.1	%	1	11/24/20	TB/QH	SM2540E MOD-11
Mercury Digestion	Completed				11/25/20	ARW/VT	SW7471B
Paint Filter Test	Passed		PASS/FAIL		11/24/20	R	SW9095B
Sludge Ext. for PCB	Completed				11/25/20	E/E	SW3550C
Total Metals Digest	Completed				11/24/20	B/AG/BF	SW3050B
Polychlorinated Biphenyls							
PCB-1016	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1221	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1232	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1242	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1248	ND	280	ug/Kg	1	11/30/20	SC	SW8082A

Phoenix I.D.: CH19844

Project ID:
Client ID: 20-11-29

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1254	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1260	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1262	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
PCB-1268	ND	280	ug/Kg	1	11/30/20	SC	SW8082A
QA/QC Surrogates							
% DCBP	80		%	1	11/30/20	SC	30 - 150 %
% DCBP (Confirmation)	66		%	1	11/30/20	SC	30 - 150 %
% TCMX	57		%	1	11/30/20	SC	30 - 150 %
% TCMX (Confirmation)	63		%	1	11/30/20	SC	30 - 150 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Corrosivity is based solely on the pH analysis performed above.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
December 04, 2020
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 04, 2020

QA/QC Data

SDG I.D.: GCH19844

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 554559 (mg/kg), QC Sample No: CH19593 2X (CH19844)													
Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	122	122	0.0	103	109	5.7	75 - 125	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 75-125%													
QA/QC Batch 554498 (mg/kg), QC Sample No: CH19662 (CH19844)													
ICP Metals - Soil													
Arsenic	BRL	0.67	2.04	2.12	NC	86.4	89.0	3.0	98.4			75 - 125	35
Barium	BRL	0.33	80.2	74.7	7.10	85.9	96.7	11.8	103			75 - 125	35
Beryllium	BRL	0.27	0.27	0.27	NC	92.3	107	14.8	98.5			75 - 125	35
Cadmium	BRL	0.33	0.92	0.92	NC	89.5	111	21.4	96.6			75 - 125	35
Chromium	BRL	0.33	19.0	16.1	16.5	89.1	100	11.5	98.0			75 - 125	35
Copper	BRL	0.67	26.3	24.3	7.90	80.8	91.7	12.6	98.7			75 - 125	35
Lead	BRL	0.33	71.0	72.8	2.50	84.8	88.7	4.5	99.6			75 - 125	35
Nickel	BRL	0.33	24.7	18.8	27.1	92.3	111	18.4	92.8			75 - 125	35
Selenium	BRL	1.3	<1.5	<1.6	NC	87.1	94.6	8.3	94.8			75 - 125	35
Silver	BRL	0.33	<0.37	<0.39	NC	76.3	80.2	5.0	94.5			75 - 125	35
Zinc	BRL	0.67	75.0	72.4	3.50	87.0	98.7	12.6	99.7			75 - 125	35
Comment:													
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.													

PHOENIX

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Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 04, 2020

QA/QC Data

SDG I.D.: GCH19844

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 554549 (PH), QC Sample No: CH19386 (CH19844)													
pH at 25C - Soil			5.82	5.81	0.20							85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 554521 (%), QC Sample No: CH19455 (CH19844)													
Total Solids	BRL	0.1	16.5	15.5	6.30	100						75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													

PHOENIX

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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 04, 2020

QA/QC Data

SDG I.D.: GCH19844

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 554720 (ug/Kg), QC Sample No: CH19397 (CH19844)										
Polychlorinated Biphenyls - Sludge										
PCB-1016	ND	13	69	71	2.9				40 - 140	30
PCB-1221	ND	13							40 - 140	30
PCB-1232	ND	13							40 - 140	30
PCB-1242	ND	13							40 - 140	30
PCB-1248	ND	13							40 - 140	30
PCB-1254	ND	13							40 - 140	30
PCB-1260	ND	13	86	89	3.4				40 - 140	30
PCB-1262	ND	13							40 - 140	30
PCB-1268	ND	13							40 - 140	30
% DCBP (Surrogate Rec)	82	%	90	89	1.1				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	83	%	86	82	4.8				30 - 150	30
% TCMX (Surrogate Rec)	68	%	70	70	0.0				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	64	%	65	65	0.0				30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
December 04, 2020

Friday, December 04, 2020

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCH19844 - VEOLIAFR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

December 04, 2020

SDG I.D.: GCH19844

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [ ] No [ ]
Coolant: IPK [ ] ICE [ ] No [ ]

CHAIN OF CUSTODY RECORD

Temp 23°C Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery:
[ ] Fax #:
[X] Email: jesselyn.dugas@veolia.com

Customer: Customer: Veolia FR
Address: Address: 1979 Bay St. Fall River, Ma 02724
Attn: Jesselyn A Dugas
E-mail: Jesselyn.dugas@veolia.com
Phone: (508)672-4530 FAX:(508)679-8241

Project:
Report to:
Invoice to:
Phone #:
Fax #:

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
OIL=Oil B=Bulk L=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Paint Filter Test	RCRA 8 metals	Table H (Attached)	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ])250ml [ ])500ml [ ])1000ml	PL H2SO4 [ ])250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria (as is)	Bacteria (w/thio)
19844	20-11-29	Lake	11/18	0300-2230	✓	✓	✓		1								

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	11-23-20	7:45
[signature]	[signature]	11/24	1540

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

gch 19844

TABLE H

Pg. 2 of 2

Discharge Serial Number: 001-1	Monitoring Location: S		
Wastewater Description: Dewatered or Thickened Sludge			
Monitoring Location Description: Dewatered Sludge After Filter Press			
PARAMETER	INSTANTANEOUS MONITORING		REPORTING FORM
	Units	Grab Sample Freq.	
Arsenic, Total	mg/kg	Bi-Monthly	DMR
Beryllium, Total	mg/kg	Bi-Monthly	DMR
Cadmium, Total	mg/kg	Bi-Monthly	DMR
Chromium, Total	mg/kg	Bi-Monthly	DMR
Copper, Total	mg/kg	Bi-Monthly	DMR
Lead, Total	mg/kg	Bi-Monthly	DMR
Mercury, Total	mg/kg	Bi-Monthly	DMR
Nickel, Total	mg/kg	Bi-Monthly	DMR
~~Nitrogen, Ammonia *~~	~~mg/kg~~	~~Bi-Monthly~~	~~DMR*~~
~~Nitrogen, Nitrate (total as N) *~~	~~mg/kg~~	~~Bi-Monthly~~	~~DMR*~~
~~Nitrogen, Organic *~~	~~mg/kg~~	~~Bi-Monthly~~	~~DMR*~~
~~Nitrogen, Nitrite (total as N) *~~	~~mg/kg~~	~~Bi-Monthly~~	~~DMR*~~
~~Nitrogen, Total *~~	~~mg/kg~~	~~Bi-Monthly~~	~~DMR*~~
pH	S.U.	Bi-Monthly	DMR
Polychlorinated Biphenyls	mg/kg	Bi-Monthly	DMR
Selenium, Total	mg/kg	Bi-Monthly	DMR
Solids, Fixed	%	Bi-Monthly	DMR
Solids, Total	%	Bi-Monthly	DMR
Solids, Volatile	%	Bi-Monthly	DMR
Zinc, Total	mg/kg	Bi-Monthly	DMR

(*) required for composting or land application only

Testing for inorganic pollutants shall follow "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 as updated and/or revised.

[redacted]

Calbe Feb. 2021

PHOENIX
Environmental Laboratories, Inc.

Tuesday, March 02, 2021

Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Project ID:
SDG ID: GCH68904
Sample ID#s: CH68904

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

March 02, 2021

SDG I.D.: GCH68904

Project ID:

Client Id	Lab Id	Matrix
20-02-101	CH68904	SLUDGE

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

March 02, 2021

FOR: Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Sample Information		Custody Information		Date	Time
Matrix:	SLUDGE	Collected by:		02/18/21	9:10
Location Code:	VEOLIAFR	Received by:	CP	02/25/21	18:11
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCH68904
Phoenix ID: CH68904

Project ID:
Client ID: 20-02-101

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	1.01	0.44	mg/Kg	1	02/26/21	EK	SW6010D
Arsenic	3.21	0.89	mg/Kg	1	02/26/21	CPP	SW6010D
Barium	147	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Beryllium	< 0.44	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Cadmium	1.44	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Chromium	41.9	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Copper	225	4.4	mg/Kg	10	02/26/21	CPP	SW6010D
Mercury	0.31	0.23	mg/kg	5	03/01/21	RS	SW7471B
Nickel	13.3	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Lead	55.9	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Selenium	< 2.2	2.2	mg/Kg	1	02/26/21	CPP	SW6010D
Zinc	381	0.44	mg/Kg	1	02/26/21	CPP	SW6010D
Total Solids @ 104C	25.1	0.1	%	1	02/25/21	MW/LS	SM2540B-11
Corrosivity	Negative		Pos/Neg	1	02/25/21	AP	SW846-Corr
Fixed Solids @ 500C	21.0	0.1	%	1	02/25/21	MW/LS	SM2540E MOD-11
pH - Sludge	5.26	1.00	pH Units	1	02/25/21 22:06	AP	SW9045D
Volatile Solids @ 500C	79.0	0.1	%	1	02/25/21	MW/LS	SM2540E MOD-11
Mercury Digestion	Completed				03/01/21	ARW/KL	SW7471B
Paint Filter Test	Passed		PASS/FAIL		02/26/21	B	SW9095B
Sludge Ext. for PCB	Completed				02/26/21	E/E	SW3550C
Total Metals Digest	Completed				02/25/21		SW3050B

Polychlorinated Biphenyls

PCB-1016	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1221	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1232	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1242	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1248	ND	200	ug/Kg	1	03/01/21	SC	SW8082A

Phoenix I.D.: CH68904

Project ID:
Client ID: 20-02-101

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1254	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1260	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1262	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
PCB-1268	ND	200	ug/Kg	1	03/01/21	SC	SW8082A
QA/QC Surrogates							
% DCBP	78		%	1	03/01/21	SC	30 - 150 %
% DCBP (Confirmation)	72		%	1	03/01/21	SC	30 - 150 %
% TCMX	58		%	1	03/01/21	SC	30 - 150 %
% TCMX (Confirmation)	54		%	1	03/01/21	SC	30 - 150 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Corrosivity is based solely on the pH analysis performed above.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
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Phyllis Shiller, Laboratory Director
March 02, 2021
Reviewed and Released by: Megan Trujillo

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 02, 2021

QA/QC Data

SDG I.D.: GCH68904

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 564972 (mg/kg), QC Sample No: CH69211 2X (CH68904)													
Mercury - Soil	BRL	0.03	<0.02	<0.03	NC	99.3	93.1	6.4	83.2	81.1	2.6	75 - 125	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 75-125%													
QA/QC Batch 564694 (mg/kg), QC Sample No: CH68517 (CH68904)													
ICP Metals - Soil													
Arsenic	BRL	0.67	1.06	0.83	NC	110	120	8.7	107			75 - 125	35
Barium	BRL	0.33	19.1	18.8	1.60	107	119	10.6	112			75 - 125	35
Beryllium	BRL	0.27	<0.29	<0.30	NC	111	115	3.5	106			75 - 125	35
Cadmium	BRL	0.33	0.42	0.45	NC	114	120	5.1	109			75 - 125	35
Chromium	BRL	0.33	10.8	11.1	2.70	111	119	7.0	108			75 - 125	35
Copper	BRL	0.67	7.5	9.64	25.0	101	109	7.6	102			75 - 125	35
Lead	BRL	0.33	18.3	14.9	20.5	109	114	4.5	116			75 - 125	35
Nickel	BRL	0.33	12.7	13.0	2.30	113	118	4.3	101			75 - 125	35
Selenium	BRL	1.3	<1.5	<1.5	NC	100	106	5.8	98.1			75 - 125	35
Silver	BRL	0.33	<0.36	<0.38	NC	97.6	108	10.1	100			75 - 125	35
Zinc	BRL	0.67	13.4	15.2	12.6	107	114	6.3	103			75 - 125	35
Comment:													
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.													

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 02, 2021

QA/QC Data

SDG I.D.: GCH68904

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 564727 (%), QC Sample No: CH67933 (CH68904)													
Total Solids	BRL	0.1	7.99	7.92	0.90	100						75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 564730 (PH), QC Sample No: CH68864 (CH68904)													
pH at 25C - Soil			4.53	4.51	NC	99.9						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 02, 2021

QA/QC Data

SDG I.D.: GCH68904

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 564924 (ug/Kg), QC Sample No: CH67233 (CH68904)										
Polychlorinated Biphenyls - Sludge										
PCB-1016	ND	13	60	60	0.0				40 - 140	30
PCB-1221	ND	13							40 - 140	30
PCB-1232	ND	13							40 - 140	30
PCB-1242	ND	13							40 - 140	30
PCB-1248	ND	13							40 - 140	30
PCB-1254	ND	13							40 - 140	30
PCB-1260	ND	13	80	82	2.5				40 - 140	30
PCB-1262	ND	13							40 - 140	30
PCB-1268	ND	13							40 - 140	30
% DCBP (Surrogate Rec)	94	%	94	97	3.1				30 - 150	30
% DCBP (Surrogate Rec) (Confirm	97	%	91	89	2.2				30 - 150	30
% TCMX (Surrogate Rec)	59	%	65	64	1.6				30 - 150	30
% TCMX (Surrogate Rec) (Confirm	66	%	68	62	9.2				30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
March 02, 2021

Tuesday, March 02, 2021

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCH68904 - VEOLIAFR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

March 02, 2021

SDG I.D.: GCH68904

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 1.2°C Pg 1 of 1

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery/Contact Options:
[ ] Fax:
[ ] Phone: 508-672-4530
[ ] Email: ~~jeanne.wordell@veolia.com~~

Customer: VEOLIA-FRWWTP
Address: 1979 BAY STREET
FALL RIVER, MA 02724

Project:
Report to: ~~JEANNE WORDELL~~ Jesselyn Dugas
Invoice to: ACCOUNTS PAYABLE
QUOTE #

Project P.O:

This section must be completed with Bottle Quantities!

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil
B=Bulk L=Liquid X = _____(Other)

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	~~RCRA-8 metals~~	~~Paint filter test~~	~~Table II (attached)~~	TP04	TKN, AMMONIA	VOCs (624)	TOTAL CYANIDE	OIL & GREASE	TOTAL CD, CR, CU, PB, NI, AG, ZN	TOTAL MERCURY	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle w/tio	Bacteria Bottle as is
68904	20-02-101	SL	2/18	0910	✓	✓	✓																			

Relinquished by:	Accepted by:	Date:	Time:
		2-25-21	1645
		2/25	1811

Comments, Special Requirements or Regulations:

Turnaround Time:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1 GW-1 [ ] S-1 GW-2 [ ] S-1 GW-3
[ ] S-2 GW-1 [ ] S-2 GW-2 [ ] S-2 GW-3
[ ] S-3 GW-1 [ ] S-3 GW-2 [ ] S-3 GW-3
[ ] MWRA eSMART [ ] Other

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other

* SURCHARGE APPLIES

gch 68904

TABLE H

Discharge Serial Number: 001-1	Monitoring Location: S		
Wastewater Description: Dewatered or Thickened Sludge			
Monitoring Location Description: Dewatered Sludge After Filter Press			
PARAMETER	INSTANTANEOUS MONITORING		REPORTING FORM
	Units	Grab Sample Freq.	
Arsenic, Total	mg/kg	Bi-Monthly	DMR
Beryllium, Total	mg/kg	Bi-Monthly	DMR
Cadmium, Total	mg/kg	Bi-Monthly	DMR
Chromium, Total	mg/kg	Bi-Monthly	DMR
Copper, Total	mg/kg	Bi-Monthly	DMR
Lead, Total	mg/kg	Bi-Monthly	DMR
Mercury, Total	mg/kg	Bi-Monthly	DMR
Nickel, Total	mg/kg	Bi-Monthly	DMR
~~Nitrogen, Ammonia *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Nitrate (total as N) *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Organic *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Nitrite (total as N) *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Total *~~	~~mg/kg~~	Bi-Monthly	DMR*
pH	S.U.	Bi-Monthly	DMR
Polychlorinated Biphenyls	mg/kg	Bi-Monthly	DMR
Selenium, Total	mg/kg	Bi-Monthly	DMR
Solids, Fixed	%	Bi-Monthly	DMR
Solids, Total	%	Bi-Monthly	DMR
Solids, Volatile	%	Bi-Monthly	DMR
Zinc, Total	mg/kg	Bi-Monthly	DMR

(*) required for composting or land application only

Testing for inorganic pollutants shall follow "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 as updated and/or revised.

* Waste water to be reported as mg/L *

Calle May 2021

PHOENIX
Environmental Laboratories, Inc.

Wednesday, June 02, 2021

Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Project ID:
SDG ID: GCI39211
Sample ID#s: CI39211

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
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PHOENIX

Environmental Laboratories, Inc.
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Sample Id Cross Reference

June 02, 2021

SDG I.D.: GCI39211

Project ID:

Client Id	Lab Id	Matrix
21-05-30	CI39211	SLUDGE

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

June 02, 2021

FOR: Ms Jesselyn Dugas
Veolia Fall River WWTP
1979 Bay St
Fall River MA 02724-1663

Sample Information		Custody Information		Date	Time
Matrix:	SLUDGE	Collected by:		05/25/21	19:00
Location Code:	VEOLIAFR	Received by:	CP	05/26/21	15:23
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCI39211
Phoenix ID: CI39211

Project ID:
Client ID: 21-05-30

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Sulfur	0.752	0.014	%	100	06/02/21	TH	SW6010D
Silver	1.08	0.69	mg/Kg	1	05/30/21	EK	SW6010D
Arsenic	3.1	1.4	mg/Kg	1	05/30/21	TH	SW6010D
Barium	198	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Beryllium	< 0.69	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Cadmium	1.47	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Chromium	28.4	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Copper	317	6.9	mg/Kg	10	05/30/21	TH	SW6010D
Mercury	< 0.43	0.43	mg/kg	5	05/27/21	AT	SW7471B
Nickel	9.43	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Lead	40.9	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Selenium	4.0	3.5	mg/Kg	1	05/30/21	EK	SW6010D
Zinc	417	0.69	mg/Kg	1	05/30/21	TH	SW6010D
Total Solids @ 104C	15.4	0.1	%	1	05/26/21	MW/MCH	SM2540B-11
Fixed Solids @ 500C	15.3	0.1	%	1	05/26/21	MW/MCH	SM2540E MOD-11
pH - Sludge	5.55	1.00	pH Units	1	05/27/21 11:38	DJ/EG	SW9045D
Volatile Solids @ 500C	84.7	0.1	%	1	05/26/21	MW/MCH	SM2540E MOD-11
Mercury Digestion	Completed				05/27/21	AB/AB/AT	SW7471B
Paint Filter Test	Passed		PASS/FAIL		05/26/21	B	SW9095B
Sludge Ext. for PCB	Completed				05/26/21	E/E	SW3550C
TCLP Extraction for Organics	Completed				05/26/21	AB	SW1311
TCLP Semi-Volatile Extraction	Completed				05/27/21	A/A	SW3510C
TCLP Extraction Volatiles	Completed				05/26/21	AB	SW1311
Total Metals Digest	Completed				05/26/21	B/AG	SW3050B
Polychlorinated Biphenyls							
PCB-1016	ND	310	ug/Kg	1	05/27/21	SC	SW8082A

Ver 1

Project ID:
Client ID: 21-05-30

Phoenix I.D.: CI39211

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
PCB-1221	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1232	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1242	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1248	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1254	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1260	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1262	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
PCB-1268	ND	310	ug/Kg	1	05/27/21	SC	SW8082A
QA/QC Surrogates							
% DCBP	84		%	1	05/27/21	SC	30 - 150 %
% DCBP (Confirmation)	64		%	1	05/27/21	SC	30 - 150 %
% TCMX	60		%	1	05/27/21	SC	30 - 150 %
% TCMX (Confirmation)	61		%	1	05/27/21	SC	30 - 150 %
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Methyl ethyl ketone	250	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/27/21	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	103		%	10	05/27/21	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/27/21	HM	70 - 130 %
% Dibromofluoromethane (10x)	96		%	10	05/27/21	HM	70 - 130 %
% Toluene-d8 (10x)	101		%	10	05/27/21	HM	70 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	1400	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/28/21	WB	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	72		%	1	05/28/21	WB	15 - 110 %
% 2-Fluorobiphenyl	58		%	1	05/28/21	WB	30 - 130 %
% 2-Fluorophenol	50		%	1	05/28/21	WB	15 - 110 %
% Nitrobenzene-d5	63		%	1	05/28/21	WB	30 - 130 %
% Phenol-d5	54		%	1	05/28/21	WB	15 - 110 %

Project ID:
Client ID: 21-05-30

Phoenix I.D.: CI39211

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	60		%	1	05/28/21	WB	30 - 130 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
June 02, 2021
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 02, 2021

QA/QC Data

SDG I.D.: GCI39211

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 577134 (mg/kg), QC Sample No: CI39129 2X (CI39211)														
Mercury - Soil	BRL	0.03	0.10	0.08	22.2	107	100	6.8	74.0	>125	NC	75 - 125	20	m,r
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 75-125%														
QA/QC Batch 577040 (mg/kg), QC Sample No: CI39127 (CI39211)														
ICP Metals - Soil														
Arsenic	BRL	0.67	0.78	1.34	NC	96.3	97.0	0.7	97.2			75 - 125	35	
Barium	BRL	0.33	11.4	12.4	8.40	103	98.9	4.1	104			75 - 125	35	
Beryllium	BRL	0.27	<0.25	<0.26	NC	100	89.3	11.3	95.8			75 - 125	35	
Cadmium	BRL	0.33	0.38	0.42	NC	107	90.7	16.5	96.6			75 - 125	35	
Chromium	BRL	0.33	5.32	5.74	7.60	100	95.2	4.9	100			75 - 125	35	
Copper	BRL	0.67	3.8	3.87	1.80	95.0	95.9	0.9	100			75 - 125	35	
Lead	BRL	0.33	4.46	4.79	7.10	98.8	99.1	0.3	100			75 - 125	35	
Nickel	BRL	0.33	5.19	5.45	4.90	108	96.3	11.5	95.3			75 - 125	35	
Selenium	BRL	1.3	<1.2	<1.3	NC	100	95.3	4.8	96.1			75 - 125	35	
Silver	BRL	0.33	<0.31	<0.33	NC	89.8	91.4	1.8	96.4			75 - 125	35	
Sulfur	BRL	3.3	8.0	16.0	NC	104	90.6	13.8				75 - 125	35	
Zinc	BRL	0.67	10.6	11.7	9.90	96.2	96.1	0.1	98.2			75 - 125	35	
Comment:														
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.														

m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

PHOENIX

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 02, 2021

QA/QC Data

SDG I.D.: GCI39211

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 577161 (PH), QC Sample No: CI35593 (CI39211)													
pH at 25C - Soil			8.15	8.17	0.20	100						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 577097 (%), QC Sample No: CI38504 (CI39211)													
Total Solids	BRL	0.1	18.5	18.5	0	100						75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

June 02, 2021

QA/QC Data

SDG I.D.: GCI39211

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 577084 (ug/Kg), QC Sample No: CI37848 (CI39211)											
Polychlorinated Biphenyls - Sludge											
PCB-1016	ND	13	93	89	4.4				40 - 140	30	
PCB-1221	ND	13							40 - 140	30	
PCB-1232	ND	13							40 - 140	30	
PCB-1242	ND	13							40 - 140	30	
PCB-1248	ND	13							40 - 140	30	
PCB-1254	ND	13							40 - 140	30	
PCB-1260	ND	13	98	107	8.8				40 - 140	30	
PCB-1262	ND	13							40 - 140	30	
PCB-1268	ND	13							40 - 140	30	
% DCBP (Surrogate Rec)	98	%	106	101	4.8				30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	92	%	95	94	1.1				30 - 150	30	
% TCMX (Surrogate Rec)	77	%	80	78	2.5				30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	76	%	78	75	3.9				30 - 150	30	
QA/QC Batch 577187 (ug/L), QC Sample No: CI39150 (CI39211)											
Semivolatiles - TCLP											
1,4-Dichlorobenzene	ND	17	96	70	31.3	80			40 - 140	20	r
2,4,5-Trichlorophenol	ND	17	125	92	30.4	99			30 - 130	20	r
2,4,6-Trichlorophenol	ND	17	122	89	31.3	98			30 - 130	20	r
2,4-Dinitrotoluene	ND	58	129	95	30.4	102			40 - 140	20	r
2-Methylphenol (o-cresol)	ND	17	116	88	27.5	93			30 - 130	20	r
3&4-Methylphenol (m&p-cresol)	ND	17	110	85	25.6	87			30 - 130	20	r
Hexachlorobenzene	ND	58	120	88	30.8	97			40 - 140	20	r
Hexachlorobutadiene	ND	58	98	71	32.0	85			40 - 140	20	r
Hexachloroethane	ND	58	96	72	28.6	79			40 - 140	20	r
Nitrobenzene	ND	58	120	91	27.5	94			40 - 140	20	r
Pentachlorophenol	ND	58	133	97	31.3	104			30 - 130	20	l,r
Pyridine	ND	83	88	57	42.8	70			40 - 140	20	r
% 2,4,6-Tribromophenol	96	%	105	96	9.0	106			15 - 110	20	
% 2-Fluorobiphenyl	84	%	85	75	12.5	85			30 - 130	20	
% 2-Fluorophenol	72	%	70	65	7.4	73			15 - 110	20	
% Nitrobenzene-d5	86	%	90	87	3.4	90			30 - 130	20	
% Phenol-d5	68	%	71	66	7.3	72			15 - 110	20	
% Terphenyl-d14	86	%	92	81	12.7	90			30 - 130	20	

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 577335 (ug/L), QC Sample No: CI39234 (CI39211 (10X))											
Volatiles - TCLP											
1,1-Dichloroethene	ND	5.0	88	87	1.1	117	119	1.7	70 - 130	20	
1,2-Dichloroethane	ND	0.60	97	98	1.0	117	124	5.8	70 - 130	20	

QA/QC Data

SDG I.D.: GCI39211

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Benzene	ND	0.70	96	97	1.0	117	124	5.8	70 - 130	20
Carbon tetrachloride	ND	5.0	87	85	2.3	108	113	4.5	70 - 130	20
Chlorobenzene	ND	1.0	96	96	0.0	115	120	4.3	70 - 130	20
Chloroform	ND	5.0	87	87	0.0	109	114	4.5	70 - 130	20
Methyl ethyl ketone	ND	5.0	98	96	2.1	NC	NC	NC	40 - 160	30
Tetrachloroethene	ND	1.0	95	93	2.1	112	118	5.2	70 - 130	20
Trichloroethene	ND	5.0	95	96	1.0	116	124	6.7	70 - 130	20
Vinyl chloride	ND	5.0	82	86	4.8	110	113	2.7	70 - 130	20
% 1,2-dichlorobenzene-d4	102	%	101	102	1.0	103	103	0.0	70 - 130	20
% Bromofluorobenzene	97	%	102	101	1.0	104	103	1.0	70 - 130	20
% Dibromofluoromethane	94	%	91	92	1.1	97	94	3.1	70 - 130	20
% Toluene-d8	101	%	99	99	0.0	99	100	1.0	70 - 130	20

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
The RPD criteria for the LCS/LCSD is 20%,
The MS/MSD RPD criteria is listed above.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller

Phyllis Shiller, Laboratory Director
June 02, 2021

Wednesday, June 02, 2021

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCI39211 - VEOLIAFR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

Analysis Comments

June 02, 2021 SDG I.D.: GCI39211

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

SVOA Narration

CHEM69 05/27/21-2: CI39211

The following Initial Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.071 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.073 (0.1)
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]

CHAIN OF CUSTODY RECORD

Temp 2.9 °C Pg of

PHOENIX Environmental Laboratories, Inc.

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Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Data Delivery/Contact Options:
[ ] Fax:
[ ] Phone:
[ ] Email:

Customer: Veolia FR
Address: 1979 Bay St. Fall River, MA 02724
ATTN: Jesselyn Dugas
E-mail: Jesselyn.dugas@veolia.com
Phone: (508)672-4530 FAX: (508) 679-8241

Project:
Report to:
Invoice to:
QUOTE #

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature _____ Date: _____

Matrix Code:
DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil
B=Bulk L=Liquid X = _____(Other)

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Table H Attached	Paint Filter Test	RCRA-8 metals	TCLP VOC	TCLP SVOC	% sulfer	MS/MSD*	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCL	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
39211	21-05-30	sludge cake	5/25/2021	1900	✓	✓	✓	✓	✓	✓				1									

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/26/21	0905
[signature]	[signature]	5/26/21	1523

Comments, Special Requirements or Regulations:

*MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.

Turnaround Time:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] (Residential) Direct Exposure
[ ] (Comm/Industrial) Direct Exposure
[ ] GA Leachability
[ ] GB Leachability
[ ] GA-GW Objectives
[ ] GB-GW Objectives

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1 [ ] MWRA eSMART
[ ] GW-2 [ ] S-1 10% CALC
[ ] GW-3
[ ] S-1 GW-1 [ ] S-1 GW-2 [ ] S-1 GW-3
[ ] S-2 GW-1 [ ] S-2 GW-2 [ ] S-2 GW-3
[ ] S-3 GW-1 [ ] S-3 GW-2 [ ] S-3 GW-3
[ ] SW Protection

State where samples were collected: MA

Data Format
[ ] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[X] Phoenix Std Report
[ ] Other
* SURCHARGE APPLIES

PEL-126 REV. 06/20

GCI 39211

TABLE H

Discharge Serial Number: 001-1	Monitoring Location: S		
Wastewater Description: Dewatered or Thickened Sludge			
Monitoring Location Description: Dewatered Sludge After Filter Press			
PARAMETER	INSTANTANEOUS MONITORING		REPORTING FORM
	Units	Grab Sample Freq.	
Arsenic, Total	mg/kg	Bi-Monthly	DMR
Beryllium, Total	mg/kg	Bi-Monthly	DMR
Cadmium, Total	mg/kg	Bi-Monthly	DMR
Chromium, Total	mg/kg	Bi-Monthly	DMR
Copper, Total	mg/kg	Bi-Monthly	DMR
Lead, Total	mg/kg	Bi-Monthly	DMR
Mercury, Total	mg/kg	Bi-Monthly	DMR
Nickel, Total	mg/kg	Bi-Monthly	DMR
~~Nitrogen, Ammonia *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Nitrate (total as N) *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Organic *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Nitrite (total as N) *~~	~~mg/kg~~	Bi-Monthly	DMR*
~~Nitrogen, Total *~~	~~mg/kg~~	Bi-Monthly	DMR*
pH	S.U.	Bi-Monthly	DMR
Polychlorinated Biphenyls	mg/kg	Bi-Monthly	DMR
Selenium, Total	mg/kg	Bi-Monthly	DMR
Solids, Fixed	%	Bi-Monthly	DMR
Solids, Total	%	Bi-Monthly	DMR
Solids, Volatile	%	Bi-Monthly	DMR
Zinc, Total	mg/kg	Bi-Monthly	DMR

(*) required for composting or land application only

Testing for inorganic pollutants shall follow "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 as updated and/or revised.

* Waste water to be reported as mg/L *

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
07/01/20	53.0	5.0			105	5	140	4
07/02/20	66.0	5.0			146	4	84	3
07/03/20					152	5	59	3
07/04/20								
07/05/20								
07/06/20					128	3	138	2
07/07/20	36.0	7.0			135	5	124	4
07/08/20	51.0	9.0			148	9	164	5
07/09/20					141	6	150	4
07/10/20					189	6	70	4
07/11/20								
07/12/20								
07/13/20					134	4	152	4
07/14/20					125	7	141	5
07/15/20					134	6	116	5
07/16/20					192	7	58	8
07/17/20	35.0	8.0			160	11	67	6
07/18/20	29.0	8.0						
07/19/20	29.0	7.0	2.0	<1.0				
07/20/20					178	6	142	4
07/21/20					213	7	106	5
07/22/20					171	8	140	6
07/23/20					168	8	124	5
07/24/20					202	7	123	5
07/25/20								
07/26/20								
07/27/20	23.0	5.0			114	6	58	5
07/28/20	49.0	6.0			196	9	143	6
07/29/20					156	8	74	7
07/30/20					202	11	147	8
07/31/20					140	10	95	5
MINIMUM	23.0	5.0	2.0	1.0	105	3	58	2
MAXIMUM	66.0	9.0	2.0	1.0	213	11	164	8
AVERAGE	41.2	6.7	2.0	1.0	158	7	114	5
TOTAL	371.0	60.0	2.0	1.0	3,629	158	2,615	113

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
08/01/20								
08/02/20								
08/03/20	42.0	7.0			158	8	138	6
08/04/20	38.0	9.0			213	11	140	10
08/05/20					157	11	96	6
08/06/20					156	7	95	6
08/07/20					140	7	36	9
08/08/20								
08/09/20								
08/10/20					135	8	128	8
08/11/20					202	8	135	6
08/12/20	41.0	7.0			174	5	124	5
08/13/20	49.0	6.0	3.0	<1.0	192	8	128	4
08/14/20					189	7	172	5
08/15/20								
08/16/20								
08/17/20					146	5	159	6
08/18/20					142	7	62	4
08/19/20					168	6	124	5
08/20/20					189	6	152	4
08/21/20	49.0	5.0			183	7	106	4
08/22/20								
08/23/20	27.0	5.0						
08/24/20	36.0	6.0			134	6	144	5
08/25/20					142	7	133	6
08/26/20					185	6	135	7
08/27/20					161	5	133	6
08/28/20					233	6	138	6
08/29/20								
08/30/20								
08/31/20					120	2	94	6
MINIMUM	27.0	5.0	3.0	1.0	120	2	36	4
MAXIMUM	49.0	9.0	3.0	1.0	233	11	172	10
AVERAGE	40.3	6.4	3.0	1.0	168	7	122	6
TOTAL	282.0	45.0	3.0	1.0	3,519	143	2,572	124

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
09/01/20	33.0	5.0			140	5	85	6
09/02/20	45.0	6.0			207	10	190	13
09/03/20					156	7	133	6
09/04/20					179	7	96	5
09/05/20								
09/06/20								
09/07/20					238	6	87	8
09/08/20					218	8	132	8
09/09/20					180	8	113	8
09/10/20					209	7	117	2
09/11/20	93.0	7.0			200	5	151	4
09/12/20	42.0	8.0						
09/13/20	39.0	9.0	2.0	<1.0				
09/14/20	35.0	7.0			175	6	119	4
09/15/20					169	6	100	8
09/16/20					184	10	106	10
09/17/20					177	6	116	5
09/18/20					212	6	142	4
09/19/20								
09/20/20								
09/21/20					180	4	180	5
09/22/20					157	7	186	7
09/23/20	34.0	10.0			156	7	101	6
09/24/20	51.0	8.0			194	7	184	7
09/25/20					218	6	168	5
09/26/20								
09/27/20								
09/28/20	59.0	8.0			227	6	218	6
09/29/20	45.0	7.0			134	7	121	4
09/30/20					206	12	221	6
MINIMUM	33.0	5.0	2.0	1.0	134	4	85	2
MAXIMUM	93.0	10.0	2.0	1.0	238	12	221	13
AVERAGE	47.6	7.5	2.0	1.0	187	7	139	6
TOTAL	476.0	75.0	2.0	1.0	4,116	153	3,066	137

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
10/01/20					189	7	148	4
10/02/20					203	6	134	4
10/03/20								
10/04/20								
10/05/20	63.0	9.0			108	12	214	7
10/06/20	49.0	10.0			68	6	155	6
10/07/20					212	9	146	5
10/08/20					202	8	170	4
10/09/20					200	7	148	4
10/10/20								
10/11/20								
10/12/20					168	8	142	4
10/13/20					125	17	112	9
10/14/20	29.0	4.0			67	5	98	9
10/15/20	59.0	6.0	2.0	1.0	172	5	124	4
10/16/20					154	6	94	4
10/17/20								
10/18/20								
10/19/20					112	4	121	5
10/20/20					99	5	86	4
10/21/20					113	6	120	4
10/22/20					110	7	126	4
10/23/20	46.0	6.0			217	6	162	4
10/24/20								
10/25/20	39.0	6.0						
10/26/20	73.0	5.0			150	5	145	5
10/27/20					151	7	149	5
10/28/20					123	6	172	5
10/29/20					110	12	101	8
10/30/20					33	6	32	5
10/31/20								

MINIMUM	29.0	4.0	2.0	1.0	33	4	32	4
MAXIMUM	73.0	10.0	2.0	1.0	217	17	214	9
AVERAGE	51.1	6.6	2.0	1.0	140	7	132	5
TOTAL	358.0	46.0	2.0	1.0	3,086	160	2,899	113

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
11/01/20								
11/02/20	25.0	4.0			58	4	91	4
11/03/20	32.0	5.0			114	3	82	2
11/04/20					130	4	136	3
11/05/20					120	4	118	3
11/06/20					126	5	82	4
11/07/20								
11/08/20								
11/09/20					86	4	110	3
11/10/20	38.0	5.0			136	6	127	4
11/11/20	30.0	5.0			149	6	135	5
11/12/20					104	8	155	6
11/13/20					127	5	50	4
11/14/20								
11/15/20								
11/16/20					101	7	136	5
11/17/20					145	5	67	3
11/18/20					121	3	112	3
11/19/20					128	6	93	6
11/20/20	32.0	6.0			208	4	136	4
11/21/20	32.0	5.0						
11/22/20	23.0	6.0						
11/23/20	29.0	10.0	4.0	1.0	126	17	92	21
11/24/20					114	8	166	6
11/25/20					131	4	94	3
11/26/20					134	10	71	7
11/27/20					80	4	58	3
11/28/20								
11/29/20								
11/30/20					90	4	124	3

MINIMUM	23.0	4.0	4.0	1.0	58	3	50	2
MAXIMUM	38.0	10.0	4.0	1.0	208	17	166	21
AVERAGE	30.1	5.8	4.0	1.0	120	6	106	5
TOTAL	241.0	46.0	4.0	1.0	2,528	121	2,235	102

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
12/01/20					44	5	35	5
12/02/20	20.0	5.0			91	4	69	5
12/03/20	28.0	7.0			110	6	130	5
12/04/20					108	5	88	4
12/05/20								
12/06/20								
12/07/20					50	4	68	3
12/08/20					69	5	78	3
12/09/20					71	5	62	5
12/10/20					95	6	98	3
12/11/20	27.0	7.0			108	5	72	3
12/12/20	12.0	8.0						
12/13/20	23.0	8.0	2.0	1.0				
12/14/20	21.0	8.0			58	5	50	3
12/15/20					87	5	76	5
12/16/20					113	11	97	7
12/17/20					166	12	125	6
12/18/20					82	8	84	4
12/19/20								
12/20/20								
12/21/20	27.0	7.0			98	8	67	3
12/22/20	23.0	6.0			93	8	79	2
12/23/20							90	3
12/24/20					119	9	130	4
12/25/20					51	11	88	9
12/26/20								
12/27/20	15.0	5.0						
12/28/20	28.0	6.0			93	6	70	3
12/29/20					100	6	59	2
12/30/20							78	3
12/31/20							113	2

MINIMUM	12.0	5.0	2.0	1.0	44	4	35	2
MAXIMUM	28.0	8.0	2.0	1.0	166	12	130	9
AVERAGE	22.4	6.7	2.0	1.0	90	7	83	4
TOTAL	224.0	67.0	2.0	1.0	1,806	134	1,906	92

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
01/01/21					73	6	54	2
01/02/21								
01/03/21								
01/04/21					94	4	90	4
01/05/21					88	4	96	4
01/06/21					62	4	100	3
01/07/21					100	3	130	2
01/08/21	28.0	8.0			131	7	94	2
01/09/21	19.0	7.0						
01/10/21	17.0	7.0						
01/11/21	30.0	8.0			140	7	104	3
01/12/21					150	8	92	2
01/13/21					119	7	121	2
01/14/21					122	6	104	2
01/15/21					157	6	77	4
01/16/21								
01/17/21								
01/18/21					74	5	44	2
01/19/21					102	5	63	2
01/20/21	26.0	6.0			84	4	70	2
01/21/21	22.0	4.0			117	5	70	2
01/22/21					174	5	102	2
01/23/21								
01/24/21								
01/25/21					148	7	124	2
01/26/21	24.0	7.0			158	6	98	6
01/27/21	38.0	7.0	<1.0	<1.0	155	8	140	2
01/28/21					146	6	115	2
01/29/21					143	8	94	7
01/30/21								
01/31/21								

MINIMUM	17.0	4.0	1.0	1.0	62	3	44	2
MAXIMUM	38.0	8.0	1.0	1.0	174	8	140	7
AVERAGE	25.5	6.8	1.0	1.0	121	6	94	3
TOTAL	204.0	54.0	1.0	1.0	2,537	121	1,982	59

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
02/01/21	30.0	5.0			114	7	124	3
02/02/21	19.0	3.0			83	15	65	7
02/03/21					105	9	94	5
02/04/21					110	7	75	5
02/05/21					146	5	39	2
02/06/21								
02/07/21								
02/08/21					109	6	114	2
02/09/21					142	6	102	2
02/10/21					102	5	69	2
02/11/21					111	7	110	3
02/12/21	23.0	7.0			134	6	115	4
02/13/21	23.0	6.0						
02/14/21	23.0	7.0						
02/15/21	21.0	7.0			79	8	88	4
02/16/21					138	17	100	8
02/17/21					97	9	68	4
02/18/21					111	10	60	3
02/19/21					100	7	39	3
02/20/21								
02/21/21								
02/22/21					105	6	122	3
02/23/21	22.0	4.0			80	6	114	2
02/24/21	22.0	5.0	1.0	<1.0	84	6	68	2
02/25/21					107	7	86	2
02/26/21					124	6	40	2
02/27/21								
02/28/21								

MINIMUM	19.0	3.0	1.0	1.0	79	5	39	2
MAXIMUM	30.0	7.0	1.0	1.0	146	17	124	8
AVERAGE	22.9	5.5	1.0	1.0	109	8	85	3
TOTAL	183.0	44.0	1.0	1.0	2,181	155	1,692	68

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
03/01/21					64	6	64	3
03/02/21					89	7	83	3
03/03/21	22.0	7.0			101	10	99	4
03/04/21	22.0	6.0			118	10	104	4
03/05/21					86	8	74	4
03/06/21								
03/07/21								
03/08/21					100	8	115	2
03/09/21					125	11	104	3
03/10/21					107	7	89	2
03/11/21					116	6	122	2
03/12/21	27.0	5.0			158	7	97	2
03/13/21	18.0	5.0						
03/14/21	66.0	6.0	2.0	<1.0				
03/15/21	27.0	6.0			107	9	92	6
03/16/21					117	10	68	6
03/17/21					125	9	98	3
03/18/21					158	19	132	20
03/19/21					52	8	60	5
03/20/21								
03/21/21								
03/22/21					98	8	78	3
03/23/21	24.0	6.0			115	10	82	3
03/24/21	30.0	6.0			123	8	121	4
03/25/21					156	8	103	4
03/26/21					176	6	112	3
03/27/21								
03/28/21	24.0	6.0						
03/29/21	47.0	5.0			87	4	72	2
03/30/21					124	6	74	2
03/31/21					123	7	98	3

MINIMUM	18.0	5.0	2.0	1.0	52	4	60	2
MAXIMUM	66.0	7.0	2.0	1.0	176	19	132	20
AVERAGE	30.7	5.8	2.0	1.0	114	8	93	4
TOTAL	307.0	58.0	2.0	1.0	2,625	192	2,141	93

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
04/01/21					99	7	80	4
04/02/21					110	4	114	2
04/03/21								
04/04/21								
04/05/21					71	7	97	6
04/06/21					144	8	52	5
04/07/21					112	6	72	3
04/08/21					157	7	130	4
04/09/21	26.0	5.0			150	9	73	4
04/10/21	46.0	6.0						
04/11/21	23.0	6.0						
04/12/21	25.0	13.0	2.0	1.0	109	8	88	4
04/13/21					126	8	84	4
04/14/21					121	7	118	4
04/15/21					154	12	124	7
04/16/21					95	15	108	17
04/17/21								
04/18/21								
04/19/21					179	3	52	2
04/20/21					204	6	80	2
04/21/21	32.0	9.0			110	4	116	3
04/22/21	25.0	8.0			130	4	109	3
04/23/21					132	14	90	14
04/24/21								
04/25/21								
04/26/21	26.0	7.0			78	8	66	4
04/27/21	47.0	7.0			134	8	77	4
04/28/21					115	7	107	4
04/29/21					126	7	114	4
04/30/21					116	32	133	13

MINIMUM	23.0	5.0	2.0	1.0	71	3	52	2
MAXIMUM	47.0	13.0	2.0	1.0	204	32	133	17
AVERAGE	31.3	7.6	2.0	1.0	126	9	95	5
TOTAL	250.0	61.0	2.0	1.0	2,772	191	2,084	117

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
05/01/21								
05/02/21								
05/03/21					104	7	94	5
05/04/21					92	15	117	16
05/05/21					154	7	92	6
05/06/21					106	7	106	4
05/07/21	49.0	5.0			105	6	120	4
05/08/21	27.0	5.0						
05/09/21	31.0	6.0						
05/10/21	21.0	9.0	4.0	1.0	96	19	84	22
05/11/21					131	8	88	7
05/12/21					100	6	105	5
05/13/21					122	5	122	4
05/14/21					96	4	78	5
05/15/21								
05/16/21								
05/17/21					79	8	118	4
05/18/21					100	7	86	4
05/19/21	31.0	5.0			147	6	138	4
05/20/21	35.0	4.0			123	6	132	4
05/21/21					142	6	114	5
05/22/21								
05/23/21								
05/24/21	24.0	4.0			99	7	61	5
05/25/21	100.0	5.0			135	8	132	6
05/26/21					114	8	93	11
05/27/21					125	7	100	6
05/28/21					187	30	130	48
05/29/21								
05/30/21								
05/31/21					61	<3	77	4

MINIMUM	21.0	4.0	4.0	1.0	61	3	61	4
MAXIMUM	100.0	9.0	4.0	1.0	187	30	138	48
AVERAGE	39.8	5.4	4.0	1.0	115	9	104	9
TOTAL	318.0	43.0	4.0	1.0	2,418	180	2,187	179

FALL RIVER WASTEWATER MONTHLY TESTING RESULTS

MONTH	Cu-INF {ug/L}	Cu.FIN {ug/L}	Lead - Influent {ug/L}	Lead - Effluent {ug/L}	RAW.INF-BOD5 {MG/L}	FIN.EFF-BOD5 {MG/L}	RAW.INF-TSS {MG/L}	FIN.EFF-TSS {MG/L}
06/01/21					62	5	110	2
06/02/21	27.0	5.0			117	5	110	2
06/03/21	30.0	5.0			90	3	155	2
06/04/21					86	4	76	4
06/05/21								
06/06/21								
06/07/21					96	6	44	3
06/08/21					133	8	136	4
06/09/21					144	7	66	3
06/10/21					178	6	116	3
06/11/21	33.0	5.0			206	6	154	5
06/12/21	42.0	5.0						
06/13/21	27.0	6.0	<1.0	<1.0				
06/14/21	37.0	7.0			100	11	98	7
06/15/21					145	9	120	5
06/16/21					170	6	123	3
06/17/21					139	7	134	4
06/18/21					145	6	74	5
06/19/21								
06/20/21								
06/21/21	48.0	11.0			108	7	68	6
06/22/21	33.0	6.0			141	20	60	17
06/23/21					74	10	118	5
06/24/21					113	6	169	4
06/25/21					188	7	140	3
06/26/21								
06/27/21								
06/28/21	43.0	5.0			130	4	128	4
06/29/21	45.0	6.0			76	5	81	4
06/30/21					206	7	146	4

MINIMUM	27.0	5.0	1.0	1.0	62	3	44	2
MAXIMUM	48.0	11.0	1.0	1.0	206	20	169	17
AVERAGE	36.5	6.1	1.0	1.0	129	7	110	5
TOTAL	365.0	61.0	1.0	1.0	2,847	155	2,426	99

Section VI

Description & Investigation of Interference & Passthrough

SECTION VI

DESCRIPTION & INVESTIGATIONS OF INTERFERENCE AND PASSTHROUGH

The attached Table delineates POTW non--compliance as listed in the Discharge Monitoring Reports. Each parameter will be discussed below:

1. Toxicity.

Report #148 Passed.
Report #149 Passed.
Report #150 Passed.
Report #151 Passed.

Date	Lab	Report#	*Menidia*		*Menidia*		*Arbacia*	
			LC50		C-NOEC		C-NOEC	
			Lab Diluent	Receiving	*Lab Diluent*	Receiving	*Lab Diluent*	Receiving
9/15/20	NEB	148	*>59.1%*	>100%	*50%*	100%	*100%*	100%
12/15	NEB	149	*>100%*	>100%	*100%*	100%	*100%*	100%
3/16/21	NEB	150	*>100%*	>100%	*50%*	100%	*100%*	100%
6/15	NEB	151	*>100%*	>93.0%	*100%*	100%	*100%*	100%
LIMITS			100%		>/=18%		>/=18%	

Toxicity results using Lab Water as a diluent.
Toxicity results using Receiving Water as a diluent.

SUMMARY OF DMR NON-COMPLIANCE

FY 2021

Date	Copper	Chlorine	BOD	TSS	FC	pH	Tox
July 19	---	---	---	---	---	---	---
Aug 19	---	---	---	---	---	---	---
Sept 19	---	---	---	---	---	---	---
Oct 19	---	---	---	---	---	---	---
Nov 19	---	---	---	---	---	---	---
Dec 19	---	---	---	---	---	---	---
Jan 20	---	---	---	---	---	---	---
Feb 20	---	---	---	---	---	---	---
Mar 20	---	---	---	---	---	---	---
Apr 20	---	---	---	---	---	---	---
May 20	---	---	---	---	---	---	---
June 20	---	---	---	---	---	---	---

D-Daily W-Weekly M-Monthly Q-Quarterly ---No Violations

Section VII

Description of Monitoring & Sewer Inspections Performed to Detect Interference or Passthrough

SECTION VII

A DESCRIPTION OF MONITORING AND SEWER INSPECTIONS THAT WERE PERFORMED TO DETECT INTERFERENCE OR PASSTHROUGH

The City requires those industries that have been permitted and designated as Significant Industrial Users to submit self-monitoring reports as per their IPP Permits.

The minimum requirement for each SIU is to report the daily volume, the daily maximum pH, and the daily minimum pH of the wastewater they discharge to the sewer system. In addition to volume and pH, SIU's are required to sample and test for specific parameters which are intrinsic to their manufacturing processes.

Twice a year in April and October all of the SIU's are required to conduct a full battery of testing on their wastewater.

The parameters that must be tested for in the semi-annual SIU sampling are pH, Temperature, BOD, COD, TSS, O&G, Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN, TPO4, TKN, & Ammonia-N. VOC testing is required once per year. Categorical SIU's are required to test for TTO's twice per year.

We have one (1) Brewery permitted within our system. In addition to pH & Temperature, they are only required to sample for BOD, COD, TSS, O & G, Ammonia (N), TKN, & TPO4.

The City is required to conduct its own sampling and analysis on the wastewater of each SIU at least once per year. Additional testing may be done on an as needed basis.

The parameters for which the City samples are pH, Temperature, BOD, COD, TSS, O&G, Cd, Cr, Cu, Pb, Ni, Ag, Zn, CN, TPO4, TKN, VOC's & Ammonia-N.

The City is required to conduct physical inspections of all SIU's at least once per year. Additional inspections may be done on as needed basis.

The City has installed hydrostatic level sensors on fourteen (14) of its CSO's to provide dry weather alarming (before flow goes over the weir). The hydrostatic level sensors also provide wet weather flow information for each CSO. Two (2) CSO's have had screening and disinfection facilities installed. Two of the last three (3) CSO's have been closed off, and the final CSO is monitored to insure that overflows are not occurring. Inspections continue to be performed on all CSO's to maintain the level sensors, to ensure that dry weather overflows are not occurring and to document each CSO's status.

Toxicity testing is performed on a quarterly schedule as cited in the NPDES permit.

The City also tests over 3,000 parameters during the course of the year at the WWTF as required by the NPDES Permit.

Section VIII

Actions to Reduce SNC

SECTION VIII

ACTIONS TO REDUCE SNC

This year we had Three (3) SIU's in significant non-compliance.

Of the companies that had NOV's sent to them, one corrected the issue that caused the violation of their pH and has demonstrated and maintained compliance for the rest of the year. Two (2) facilities failed to sample their effluent as required in April of 2021. They have since submitted sampling results, but the results weren't submitted within 90 days of being due. In both cases, the failures were due to key personnel turnovers related to COVID-19 pandemic. Both facilities have put procedures in place to prevent future employee turnover from causing them to miss required sampling.