

Town of Deep River WPCA MOR

[illegible]

1005 BOSTON POST ROAD
MADISON, CT 06443
Phone 203-245-0568
FAX 203-318-0830
Connecticut Certification PH-0535
www.eclinconline.com



ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 131071
Sample Type: Solid
Sample Source: Bi-Annual Sludge Testing
Sampler: Client

Sample Date: 3/17/2020
Receipt Date: 3/17/2020
Report Date: 3/24/2020
Sample Site: Sludge Press

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Total Fixed Solids	15.7	%	CALC	0	3/20/2020	JM
Total Solids	10.2	%	160.3	0	3/20/2020	JM
Total Volatile Solids	84.3	%	160.4	0	3/20/2020	JM
Metals						
Arsenic	ND	mg/kg	SW6010A	6.7	3/23/2020	CET
Beryllium	ND	mg/kg	SW6010A	6.7	3/23/2020	CET
Cadmium	ND	mg/kg	SW6010A	3.4	3/23/2020	CET
Chromium	17	mg/kg	EPA 6010C	13	3/23/2020	CET
Copper	440	mg/kg	EPA 6010C	13	3/23/2020	CET
Lead	21	mg/kg	EPA 6010C	13	3/23/2020	CET
Mercury	ND	mg/kg	EPA 7471B	1.3	3/20/2020	CET
Nickel	ND	mg/kg	SW6010A	13	3/23/2020	CET
Zinc	600	mg/kg	EPA 6010C	13	3/23/2020	CET
Polychlorinatedbiphenols						
PCBs - Total	ND	mg/kg	EPA8082A	1	3/23/2020	CET



DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Comments CET - CT PH-0116.

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ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Effluent

Sample ID#: 130803
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Ammonia as N	0.72	mg/L	ASTM D6919-03	0.05	3/6/2020	KC
Nitrate as N	1.15	mg/L	EPA300.0	0.1	3/4/2020	JB
Nitrite as N	0.05	mg/L	EPA300.0	0.01	3/4/2020	JB
Orthophosphate as P	ND	mg/L	EPA300.0	0.02	3/4/2020	JB
Phosphorous - Total as P	0.04	mg/L	EPA 200.7	0.04	3/10/2020	JB
TKN as N	1.76	mg/L	4500NorgC	0.5	3/9/2020	KC
Total Nitrogen as N	2.96	mg/L	CALC	1	3/10/2020	KC

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 130802
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Ammonia as N	25.6	mg/L	ASTM D6919-03	0.05	3/6/2020	KC
Nitrate as N	0.30	mg/L	EPA300.0	0.1	3/4/2020	JB
Nitrite as N	ND	mg/L	EPA300.0	0.01	3/4/2020	JB
Orthophosphate as P	3.16	mg/L	EPA300.0	0.02	3/4/2020	JB
Phosphorous -Total as P	5.31	mg/L	EPA 200.7	0.04	3/10/2020	JB
TKN as N	37.8	mg/L	4500NorgC	0.5	3/9/2020	KC
Total Nitrogen as N	38.1	mg/L	CALC	1	3/10/2020	KC


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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 130804
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical Alkalinity	142	mg/L	SM2320-B	20	3/10/2020	KC

A handwritten signature in black ink, appearing to read "DB", is written over a horizontal line.

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 130805
Sample Type: Wastewater
Sample Source: Monthly
Sampler: Client

Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical Alkalinity	<20.0	mg/L	SM2320-B	20	3/10/2020	KC

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

ENRONMENTAL
CONSULTING LABORATORIES, INC.

1005 Boston Post Road
Madison, CT 06443

(203) 245-0568 Phone
(203) 318-0830 Fax

Client: Town of Deep River-WPCF

Contact: Mr. Peter Lewis

Address: 99 Winter Ave, Deep River, CT 06417

Phone: 860-526-6044 Fax:

Samplers Name: (Print)

John Ely

PWSID#:

System Type:

Client I.D.	Sampling Location	Date	Time	Sample Type			Number of Containers	Required Analysis					Cl ₂ Res.	ECL Sample I.D.#
				Water	Solid	Comp	Grab	TN Series	Ortho & Total Phos	Alkalinity (grab sample)	BOD/TSS	Fecal/Enterococcus May-Oct		
	Influent (Monthly)	3/3/20		X		X		X	X			1 - 16oz		130802
	Effluent (Monthly)	3/3/20		X		X		X	X			1 - 4oz (H2SO4) 1 - 32oz 1 - 4oz (H2SO4)		130803
	Influent (Monthly)	3/3/20		X			X		X			1 - 8oz		130804
	Effluent (Monthly)	3/3/20		X			X		X			1 - 8oz		130805
	Influent (Weekly)	3/3/20		X		X					X	1 - 8oz		
	Effluent (Weekly)	3/3/20		X		X					X	1 - 16oz		
	Effluent (Weekly)			X			X					1 - Bact.		

Relinquished by:

Time

Received by:

3/3/20

Were Samples received within holding time? Y N
Were Samples chilled upon receipt? Y N
Were Samples in appropriate containers? Y N
If No Explain

Relinquished by:

Time

Received by:

9:40

Are containers broken/leaking? Y N
Did Samples need to be split upon receipt? Y N
Were Samples preserved properly? Y N

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 130806
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	195	mg/L	SM5210B	2	3/4/2020	KC
Total Suspended Solids	184	mg/L	SM2540D	1	3/6/2020	JB

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample Date: 3/3/2020
Receipt Date: 3/3/2020
Report Date: 3/11/2020
Sample Site: Effluent

Sample ID#: 130807
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	3/4/2020	KC
Total Suspended Solids	3.00	mg/L	SM2540D	1	3/6/2020	JB

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Are containers broken/leaking? Y/N

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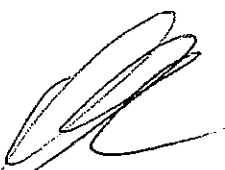


ENVIRONMENTAL
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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 130943
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/10/2020
Receipt Date: 3/10/2020
Report Date: 3/17/2020
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	3/11/2020	KC
Total Suspended Solids	3.00	mg/L	SM2540D	1	3/13/2020	JB


DAVID BARRIS - LABORATORY DIRECTOR

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 130942
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Sample Date: 3/10/2020
Receipt Date: 3/10/2020
Report Date: 3/17/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	284	mg/L	SM5210B	2	3/11/2020	KC
Total Suspended Solids	194	mg/L	SM2540D	1	3/13/2020	JB


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
(203) 318-9830 Fax

Phone: 860-526-6044

John Ellis

[illegible]

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 131317
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Sample Date: 3/31/2020
Receipt Date: 3/31/2020
Report Date: 4/7/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	92.2	mg/L	SM5210B	2	4/1/2020	KC
Total Suspended Solids	52.0	mg/L	SM2540D	1	4/3/2020	JB

A handwritten signature in black ink, appearing to read "DB", is written over the printed name "DAVID BARRIS".

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 131318
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/31/2020
Receipt Date: 3/31/2020
Report Date: 4/7/2020
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	2.03	mg/L	SM5210B	2	4/1/2020	KC
Total Suspended Solids	3.00	mg/L	SM2540D	1	4/3/2020	JB


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

(203) 245-0568 Phone
(203) 318-0830 Fax

Fax:

Influent/Effluent Testing

Samplers Name: (Print)

4/2/20

[illegible]

Relinquished by:

Received by.

Time

Date _____

Received by: *[Signature]* 3/3/20 9:33

~~Relinquished by:~~

Received by:

Time

Date _____

Were Samples received within holding time? Y/N
 Were Samples chilled upon receipt? Y (N) 8:00
 Were Samples in appropriate containers? Y/N
 If No Explain

Are containers broken/leaking? Y/N

Were Samples presented properly? Y / N

1. *Chlorophyll a* (Chl a)

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis

Sample ID#: 131069
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client

Sample Date: 3/17/2020
Receipt Date: 3/17/2020
Report Date: 3/24/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	217	mg/L	SM5210B	2	3/18/2020	KC
Total Suspended Solids	176	mg/L	SM2540D	1	3/20/2020	JB


DAX B. BARRIS - LABORATORY DIRECTOR

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CONSULTING LABORATORIES, INC.

Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 131070
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/17/2020
Receipt Date: 3/17/2020
Report Date: 3/24/2020
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	3/18/2020	KC
Total Suspended Solids	4.00	mg/L	SM2540D	1	3/20/2020	JB

A handwritten signature in black ink, appearing to read "David Barris", is written over a horizontal line.

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Fax:

Influent/Effluent Testing

John Elly

Date _____

Were Samples presented properly? Y/N

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ENVIRONMENTAL
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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 131212
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/24/2020
Receipt Date: 3/24/2020
Report Date: 3/31/2020
Sample Site: Influent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	117	mg/L	SM5210B	2	3/25/2020	KC
Total Suspended Solids	200	mg/L	SM2540D	1	3/27/2020	JB

A handwritten signature in black ink, appearing to read "David Barris", is written over a horizontal line.

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Report of Analysis

Name: Town of Deep River WPCF
99 Winter Ave
Deep River, CT 06417
Attn: Pete Lewis
Sample ID#: 131213
Sample Type: Wastewater
Sample Source: Weekly
Sampler: Client
Sample Date: 3/24/2020
Receipt Date: 3/24/2020
Report Date: 3/31/2020
Sample Site: Effluent

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Chemical						
Biological Oxygen Demand	2.38	mg/L	SM5210B	2	3/25/2020	KC
Total Suspended Solids	3.00	mg/L	SM2540D	1	3/27/2020	JB

A handwritten signature in black ink, appearing to read "David Barris", is written over a light blue grid background.

DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Client: Town of Deep River-WPCF

Contact: Mr. Peter Lewis

Address: 99 Winter Ave, Deep River, CT 06417

Phone: 860-526-6044

Samplers Name: (Print)

John

Project:

Weekly

Influent/Effluent Testing

[illegible]

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Report of Analysis

Name:	Town of Deep River WPCF 99 Winter Ave Deep River, CT 06417 Attn: Pete Lewis	Sample ID#:	130944
		Sample Type:	Wastewater
		Sample Source:	Bi-Annual Toxicity Testing
		Sampler:	Client
Sample Date:	3/10/2020		
Receipt Date:	3/10/2020		
Report Date:	3/27/2020		
Sample Site:	Final Effluent		

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Biological						
Aquatic Toxicity	See Attached	%	AQ	0	3/11/2020	JB
Chemical						
Ammonia as N	0.09	mg/L	ASTM D6919-03	0.05	3/14/2020	KC
Biological Oxygen Demand	<2.00	mg/L	SM5210B	2	3/11/2020	KC
Cyanide-Amenable	ND	mg/L	EPA 335.4	0.01	3/19/2020	CET
Cyanide-Total	ND	mg/L	EPA 335.4	0.01	3/19/2020	CET
Nitrate as N	0.46	mg/L	EPA300.0	0.1	3/10/2020	JB
Nitrite as N	0.02	mg/L	EPA300.0	0.01	3/10/2020	JB
Phenols - Total	ND	mg/L	420.1	0.1	3/16/2020	CET
Phosphorous -Total as P	0.05	mg/L	EPA 200.7	0.04	3/17/2020	JB
Total Suspended Solids	ND	mg/L	SM2540D	1	3/13/2020	JB
Alkalinity(1 - Initial)	51.2	mg/L	SM2320-B	20	3/13/2020	JM
Chlorine- Residual,Total(1 - Initial)	ND	mg/L	SM4500-Cl G	0.02	3/11/2020	JB
Hardness-Total(1 - Initial)	39.8	mg/L	EPA 200.7	1	3/13/2020	JB
Alkalinity(2 - Daph)	57.6	mg/L	SM2320-B	20	3/13/2020	JM
Chlorine- Residual,Total(2 - Daph)	ND	mg/L	SM4500-Cl G	0.02	3/13/2020	JM
Hardness-Total(2 - Daph)	46.8	mg/L	EPA 200.7	1	3/13/2020	JB
Alkalinity(3 - Fish)	54.3	mg/L	SM2320-B	20	3/13/2020	JM
Chlorine- Residual,Total(3 - Fish)	ND	mg/L	SM4500-Cl G	0.02	3/13/2020	JM
Hardness-Total(3 - Fish)	41.1	mg/L	EPA 200.7	1	3/13/2020	JB
Metals						
Aluminum	ND	mg/L	EPA 200.8	0.05	3/25/2020	CET
Antimony	ND	mg/L	EPA 200.8	0.01	3/25/2020	CET
Arsenic	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Beryllium	ND	mg/L	EPA 200.8	0.001	3/25/2020	CET

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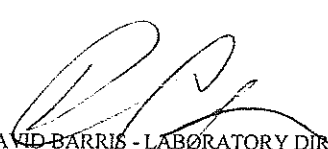


ENVIRONMENTAL
CONSULTING LABORATORIES, INC.

Report of Analysis

Name:	Town of Deep River WPCF 99 Winter Ave Deep River, CT 06417 Attn: Pete Lewis	Sample ID#:	130944
Sample Date:	3/10/2020	Sample Type:	Wastewater
Receipt Date:	3/10/2020	Sample Source:	Bi-Annual Toxicity Testing
Report Date:	3/27/2020	Sampler:	Client
Sample Site:	Final Effluent		

Parameter	Sample Result	Units	Method	MDL	Analysis Date	Analyst
Metals						
Cadmium	ND	mg/L	EPA 200.8	0.0005	3/25/2020	CET
Chromium	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Chromium(Hexavalent)	ND	mg/L	SM3500-CrD	0.01	3/10/2020	KC
Copper	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Iron	ND	mg/L	200.8	0.04	3/25/2020	CET
Lead	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Mercury	ND	mg/L	EPA245.2	0.0002	3/17/2020	CET
Nickel	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Selenium	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Silver	ND	mg/L	EPA 200.8	0.002	3/25/2020	CET
Thallium	ND	mg/L	EPA 200.8	0.005	3/25/2020	CET
Zinc	ND	mg/L	EPA 200.8	0.02	3/25/2020	CET
Physical						
Conductivity(1 - Initial)	350	umhos/cm	SM2510B	1	3/11/2020	JB
Conductivity(2 - Daph)	380	umhos/cm	SM2510B	1	3/13/2020	JM
Conductivity(3 - Fish)	363	umhos/cm	SM2510B	1	3/13/2020	JM


DAVID BARRIS - LABORATORY DIRECTOR

ND = Not Detected

Comments CET - CT PH-0116.

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 1

Facility Name:	<u>Deep River WPCF</u>	NPDES ID:	<u>CT0101745</u>
Receiving Water:	<u>Connecticut River</u>	Waterbody ID:	<u>4000</u>
Sample Collection Date(s):	<u>3/9/20 - 3/10/20</u>		
Sample Collection Time:	FROM: <u>7</u> (AM/PM) TO: (AM/PM) <u>7:45</u>		

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% Survival)

TEST SPECIES	REPLICATE 1	REPLICATE 2	REPLICATE 3
<i>Daphnia pulex</i>	100 %	100 %	100 %
<i>Pimephales promelas</i>	100 %	90 %	90 %

If less than 90% survival is recorded for one or more replicate controls, the test is invalid and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

EFFLUENT SAMPLE RESULTS

TEST SPECIES	MEAN % SURVIVAL
<i>Daphnia pulex</i>	100 %
<i>Pimephales promelas</i>	100 %

If the mean percent survival for either or both species is less than 90%, the effluent is determined toxic and an additional effluent sample must be collected and the test procedure repeated. The results for all samples must be submitted to the DEP.

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: John Ely Title: operator
Signature: [Signature] Date: 4/8/20

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: Deep River WPCF NPDES ID: CT0101745
 Dilution Water: Synthetic Lab Hardness: 50 mg/L
 Sample Collected On: 3/9/20 - 3/10/20 (date) Received On: 3/10/20 (date)
 Test Species: Daphnia pulex Source: KCL Age: < 24 hr
 Test Duration: 48 hours, Beginning: 10:30 (am/pm) On: 3/11/2020 (date)

Effluent Dilution (%)	Hour	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)		
		00	24	48	00	24	48	00	24	48	00	24	48
100 A		10	10	10	9.9	9.3	9.3	19	19	19	6.9	7.6	7.7
100 B		10	10	10	9.9	9.3	9.3	19	19	19	6.9	7.6	7.7
100 C		10	10	10	9.9	9.3	9.3	19	19	19	6.9	7.6	7.7
100 D		10	10	10	9.9	9.3	9.3	19	19	19	6.9	7.6	7.7
100 E		10	10	10	9.9	9.3	9.3	19	19	19	6.9	7.6	7.7
CONTROL 1		10	10	10	9.2	8.4	8.9	21	20	20	7.3	7.6	7.1
CONTROL 2		10	10	10	9.2	8.4	8.9	21	20	20	7.3	7.6	7.1
CONTROL 3		10	10	10	9.2	8.4	8.9	21	20	20	7.3	7.6	7.1
MEAN SAMPLE SURVIVAL (%)											1	2	3
[(A+B+C+D+E)/5] X 10 =										100	100	100	100
CONTROL SURVIVAL (%)											100	100	100

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<i>Daphnia pulex</i>	11/6/19	CuNO ₃	KCL	2.05 ppb

COMMENTS

STATEMENT OF ACKNOWLEDGEMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the testing protocol described in EPA 600/4-90/027F and Sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies except as noted above. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Laboratory Official: Kevin Clark Title: Supervisor
 Signature: [Signature] Date: 3/31/2020

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Dilution Water: <u>Synthetic Lab</u>	Hardness: <u>50 mg/L</u>
Sample Collected On: <u>3/9/20 - 3/10/20 (date)</u>	Received On: <u>3/10/20 (date)</u>
Test Species: <u>Pimephales promelas</u>	Source: <u>ECU</u>
Test Duration: <u>48 hours</u> , Beginning: <u>10:30 am/pm</u> On: <u>3/10/20 (date)</u>	Age: <u>13 days</u>

Effluent Dilution (%)		Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (su)		
		00	24	48	00	24	48	00	24	48	00	24	48
100 A		10	10	10	9.9	9.5	8.6	19	19	19	6.9	7.6	7.5
100 B		10	10	10	9.9	9.5	8.6	19	19	19	6.9	7.6	7.5
100 C		10	10	10	9.9	9.5	8.6	19	19	19	6.9	7.6	7.5
100 D		10	10	10	9.9	9.5	8.6	19	19	19	6.9	7.6	7.5
100 E		10	10	10	9.9	9.5	8.6	19	19	19	6.9	7.6	7.5
CONTROL 1		10	10	10	9.2	8.6	8.9	21	20	20	7.3	7.4	7.1
CONTROL 2		10	10	9	9.2	8.6	8.9	21	20	20	7.3	7.4	7.1
CONTROL 3		10	9	9	9.2	8.6	8.9	21	20	20	7.3	7.4	7.1
MEAN SAMPLE SURVIVAL (%)											1	2	3
[(A+B+C+D+E) / 5] X 10 = 100											CONTROL SURVIVAL (%)	100	90

REFERENCE TOXICANT RESULTS				
SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC ₅₀
<i>Pimephales promelas</i>	<u>11/6/19</u>	<u>CuCl2</u>	<u>ECU</u>	<u>6.24 ppb</u>

COMMENTS

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Laboratory Official: Karin [Signature] Title: Supervisor
 Signature: Th. M. [Signature] Date: 3/31/2020

Supplemental Chemistry (part 2s)

Facility Name: <u>Deep River WPCF</u>	NPDES ID: <u>CT0101745</u>
Receiving Water: <u>Connecticut River</u>	Waterbody ID: <u>4000</u>
Sample Collection Date(s): <u>3/9/20 - 3/10/20</u>	
Sample Collection Time: FROM: <u>7</u> (AM/PM) TO: <u>7:45</u> (AM/PM)	

Effluent Sample

Parameter	Effluent Sample
Hours	Initial (00)
pH	6.9
Conductivity	350
Alkalinity	51.2
Hardness	39.8
TRC	<0.02

100% Test Sample

Parameter	Hours	Daphnia pulex		Pimephales promelas	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		350	380	350	363
Alkalinity		51.2	57.6	51.2	54.3
Hardness		39.8	46.8	39.8	41.1
TRC		<0.02		<0.02	

0% Test Sample (Control)

Parameter	Hours	Daphnia pulex		Pimephales promelas	
		Initial (00)	Final (48)	Initial (00)	Final (48)
Conductivity		191	236	191	227
Alkalinity		43.9	43.1	43.9	42.0
Hardness		47.9	55.8	47.9	49.0
TRC		<0.02		<0.02	

Laboratory Official: Kevin M. Clark Title: Supervisor

Signature: th. m. Clark Date: 3/21/2020

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 3

NPDES Permit:	CT0101745	Exp:	9/13/06	Phone ¹ :	(860) 526-6044
Facility:	Deep River WPCF	Contact:	Peter Lewis	Phone ² :	
Address:	99 Winter Ave.	Town:	Deep River	Zip:	06417

STATEMENT OF ACKNOWLEDGEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: John Ely Title: operator

Signature: [Signature] Date: 3/9/20

Sample Date: 3/9/20 - 3/10/20 Sample Day's Flow: .169 + .158 REPEAT MONTH: MAR SEP (Circle one)

FREQUENCY	MON/LOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	BOD, 5 DAY		<u>< 2.00</u>
Each Test	001 T	mg/L	SUSPENDED SOLIDS, TOTAL		<u>< 1.00</u>
Each Test	001 T	mg/L	AMMONIA, Total		<u>0.09</u>
Each Test	001 T	mg/L	NITRITE, as N		<u>0.02</u>
Each Test	001 T	mg/L	NITRATE, as N		<u>0.46</u>
Each Test	001 T	mg/L	CYANIDE, Total		<u>< 0.01</u>
Each Test	001 T	mg/L	CYANIDE, Amenable		<u>< 0.01</u>
Each Test	001 T	mg/L	BERYLLIUM, Total		<u>< 0.001</u>
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	<u>< 0.005</u>
Each Test	001 T	mg/L	CADMIUM, Total		<u>< 0.0005</u>
Each Test	001 T	mg/L	CHROMIUM, Hexavalent		<u>< 0.01</u>

Aquatic Toxicity Monitoring Report - PART 3

<u>FREQUENCY</u>	<u>MONLOC</u>	<u>UNITS</u>	<u>PARAMETER</u>	<u>MINIMUM LEVEL</u>	<u>RESULT</u>
Each Test	001 T	mg/L	CHROMIUM, Total		< 0.005
Each Test	001 T	mg/L	COPPER, Total		< 0.005
Each Test	001 T	mg/L	LEAD, Total		< 0.005
Each Test	001 T	mg/L	THALLIUM, Total		< 0.005
Each Test	001 T	mg/L	NICKEL, Total		< 0.005
Each Test	001 T	mg/L	SILVER, Total		< 0.005
Each Test	001 T	mg/L	ZINC, Total		< 0.002
Each Test	001 T	mg/L	ANTIMONY, Total		< 0.002
Each Test	001 T	mg/L	SELENIUM, Total		< 0.01
Each Test	001 T	mg/L	PHENOLS		< 0.005
Each Test	001 T	mg/L	MERCURY, Total	0.0002 mg/L	< 0.10
Each Test	001 T	mg/L			< 0.0002

Testing Laboratory: Environmental Consulting Laboratories, Inc
1005 Boston Post Road
Madison, CT 06443 P14053

Signature: [Signature]
DCB/APP/1

Date: 3/31/20

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex*

TGA3D

AQUATIC TOXICITY: *Pimephales promelas*

TGA6C

Deep River WPCF

