VEOLIA

May 10, 2016

Ronald Merancy, Chairman
Water Pollution Control Authority
Borough of Naugatuck
229 Church Street
Naugatuck, CT 06770

Re: **April 2016 Monthly Operating Report**

Dear Mr. Merancy:

Enclosed please find Veolia Water's Monthly Operating Report for the month of April 2016.

Please contact me at the address below if you have any questions about this report.

Sincerely,
Veolia Water North America – Northeast, LLC

Christopher Makuch
Assistant Plant Manager
Veolia Water Naugatuck

cc: WPCA members: Rimas Balsys, Catherine Aresta, Pat Mallane, Jeffrey Hanson, James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck, Kathleen Luvisi, Senior Environmental Engineer, Alternative Resources, Inc.

(enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

Borough of Naugatuck
Monthly WPCF Report April 2016

This report summarizes the activities at the Borough POTW for April 2016:

1. **Highlights and Significant Issues:** Please refer to the report.
2. **Collection System Update:**

Please see attached Collections Report.

3. **Plant Performance Summary:**

Please see the attached reports and graphs for additional performance details.

Plant Process Data	Limit	Actual
Total Suspended Solids (mg/l)		
Influent Avg.	-	528
Effluent Avg.	30	6
Removal Efficiency	85%	99%
Plant Process Data*	Limit	Actual
Carbonaceous BOD (mg/l)		
Influent Avg.	-	192
Eff Avg(Nov 1 – May 31)	25	
Eff Avg(June – Oct 31)	15	4
Removal Efficiency	85%	98%

Discharge Permit Exceedance: None

	Naugatuck	Middlebury	Oxford	OTR
Apr Flow Avg. (MGD)	4.9	0.588	0.051	N/A
Sludge Liquid Total (MGal)				3565.9
Sludge Cake Total (Wet Tons)				248.5
Septage Total (MGal)	30,750	29,000	119,250	431,300

Discharge Permit Exceedance: None

Safety Incidents and Odor Complaints

	Month	YTD
Recordable Accidents	0	0
Lost Time Accidents	0	0
Odor Complaints	0	0
Unconfirmed Odor Complaints	0	0

1. **Compliance & Regulatory Issues**
   - **a.** The incinerator did not operate in April 2016 as result of the EPA MACT upgrade.
   - **b.** In April there were meetings with Borough officials and Veolia regarding the incinerator MACT upgrade and the Naugatuck project.
   - **c.** EPA will visit the facility on May 18, 2016 at 10 AM to review the draft compliance plan submitted by TRC.
2. **Odor Complaints**
   - **a.** There were no odor complaints in April.
3. **Personnel**
   - **a.** The operator and maintenance plumber positions were advertised in late April.
   - **b.** A collection system operator submitted his resignation and desire to transfer to the Seymour, CT project. That position will be advertised as well.
4. **Health & Safety**
   - **a.** Annual respiratory fit testing/training took place on April 4.

5. **Operational Information**
    a. Sludge continues to be diverted to the Ontario County Landfill in NY, Bergen County wastewater plant in NJ, Veolia Cranston, and Passaic Valley in NJ. Liquid sludge disposal is approved at Passaic valley if need be.
    b. The annual cleaning of the chlorine contact tanks and installation of disinfection/dechlorination equipment took place the week of April 8.
    c. Plant cleanup continues.
    d. On Saturday, April 16 engineering students from Central CT State University toured the facility.
6. **Collections**
    a. No report.
7. **Maintenance**
    a. The original secondary waste sludge pump for the #4 secondary tank was replaced.
    b. The Putzmeister sludge cake feed pump discharge piping was modified to allow quicker filling of cake trucks.
    c. One silo screw conveyor shaft on the silo was repaired.

8. **Capital Projects**
    a. No report.

Borough of Naugatuck
Collections Systems Report
April 2016

VEOLIA WATER

	Calls for Service
1	4/5/16 - 174 Lincoln St - Lateral problem
2	4/11/16 - 270 City Hill St - Locate lateral in main
3	4/21/16 - N Main St / Woodbine intersection
4	4/22/16 - Noisey lid complaint on Union City Rd
5	
6	
7	
8	

This Month	Year to Date
4	40

	Calls Caused By Collection System	Reason
1	4/21/16 - N Main St / Woodbine	Bellies in line caused grease and grit to back up
2		
3		
4		

High Velocity Cleaning

	Street Name	Date	Footage
1	Bird Rd 10-46 to 10-44	4/6/2016	425
2	Bird/Spruce easement 10-44 to 10-42	4/6/2016	350
3	Spruce Rd End to 10-41	4/6/2016	370
4	Homestead End to 10-35	4/7/2016	920
5	Homestead easement 10-40 to 10-38	4/7/2016	300
6	Bingham 7-234 to 7-232	4/7/2016	345
7	Lincoln St 10-72 to 10-171	4/7/2016	320
8	Auburn St 7-233 to 10-164	4/7/2016	740
9	Fuller St 10-165 to 10-164	4/7/2016	255
10	Auburn St 7-232 to 10-162	4/12/2016	1065
11	Fuller St 10-165 to 10-154	4/12/2016	255
12	Bingham End to 7-230	4/13/2016	80
13	Fuller St 10-167 to 10-170	4/13/2016	345
14	Johnson St 7-231 to 10-159	4/13/2016	1160
15	Lincoln St 10-108 to 10-106	4/13/2016	340
16	Lincoln St 10-106 to 10-104	4/14/2016	355
17	Lincoln St easement 10-101 to 10-104	4/14/2016	440
18	Johnson St 7-230 to 7-229	4/14/2016	230
19	Beacon Valley Rd 14-91 to 14-95	4/18/2016	560
20	Johnson St 7-229 to 7-226	4/18/2016	355
21	Johnson St 7-226 to 7-224	4/20/2016	365
22	Mckinley St 7-235 to 7-224	4/20/2016	130
23	Pheonix no m/h #s	4/20/2016	422
24	Johnson St 7-224 to 7-223	4/21/2016	265
25	John St 7-223 to 7-221	4/21/2016	610
26	N Main St 7-261A upstream	4/21/2016	440
27	N Main St 7-262 upstream	4/22/2016	100
28	N Main St 7-262 down stream	4/22/2016	50
29	N Main St 7-261 to 7-262	4/22/2016	370
30	Wood St 7-261 to end	4/22/2016	245
31	Pheonix no m/h #s	4/26/2016	650
32	Morning Dove Rd 14-72 to 14-60	4/26/2016	530
33	Rain Dance Cir 14-60 to 14-75	4/26/2016	250
34	Morning Dove Rd 14-60 to 14-21	4/27/2016	245
35	Red Robin Rd 14-23 to 14-21	4/27/2016	430
36	Morning Dove Rd 14-21 to	4/27/2016	1335
37			
38			
39			
40			

6 month list
Cell for service

This Month		Year to Date	
15647	Feet	153979	Feet

Root Treatment

	Street Name	Type	Footage
1			
2			
3			

This Month		Year to Date	
0	Feet	6742	Feet

Video Inspections

	Street Name	Type	Footage
1	174 Lincoln St m/h 10-100A	cctv	5
2	270 City Hill St m/h 7-180 downstream	cctv	15
3	N Main St m/h 7-262 to 7-261A	cctv	155
4	N Main St m/h 7-262 upstream	cctv	50
5			
6			
7			
8			
9			
10			
11			

This Month		Year to Date	
225	Feet	9180	Feet

Pump Station Services

	Work performed	Location	Date	Notes
1	Weekly pumpstation checks	All 5	4/1/2016	Kinsley Power serviced all generators, cleaned floats
2	Weekly pumpstation checks	All 5	4/8/2016	cleaned floats
3	Weekly pumpstation checks	All 5	4/15/2016	cleaned floats
4	Weekly pumpstation checks	All 5	4/28/2016	cleaned floats, high wetwell checks, generators exercised
5				
6				
7				

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Pump 3
Inwood	End Reading	839.1	1069.9	498.4
	Start Reading	792.9	1013.7	443.1
	Hrs Run	46.2	56.2	55.3

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
MAPLE & MAY	End Reading	3929.1	3126.6
	Start Reading	3882	3089
	Hrs Run	47.1	37.6

PUMP RUN TIMES		HOURS			
STATION		Pump 1	Pump 2	Flow Meter	
Platts Mill	End Reading	4857.8	7999.1	4481648	Lead pump replaced
	Start Reading	4857.8	7765.7	4161793	Lag pump inadequate pipe length for
	Hrs Run	0	233.4	319855 gal	accurate flow readings.

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Hopbrook	End Reading	1489.3	1016.3
	Start Reading	1459.2	994.1
	Hrs Run	30.1	22.2

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
HORTON HILL	End Reading	8974	10627.5
	Start Reading	8876.9	10540.4
	Hrs Run	97.1	87.1

Vac Truck Information

Days out of the plant working		
This Month	YTD	Remaining
11	141	9

Fuel Information	Fuel Cost	Fuel Used			
	$150.00	60.5	Gallons	YTD Gallons	
			Gallons	1528.0	Gallons
			Gallons		
			Gallons	YTD Fuel Cost	
This Months Total	$150.00	60.5	Gallons	$4,133.43	

	Mileage		Engine Hours
Month Start	197294	Month Start	6301.6
Month End	197968.3	Month End	6346.3
Total	674.3	Total	44.7

Utlity Truck Information	Fuel Cost	Fuel Used			
	$72.24	29.14	Gallons	YTD Gallons	
			Gallons	524.03	Gallons
			Gallons		
			Gallons	YTD Fuel Cost	
Monthly Totals:	**$72.24**	**29.14**	Gallons	$1,198.45	

Other tasks and notes

1	4/1/2016 - Dye tested Middlebury and Oxford lines coming into Naugy to determine direction of each towns line.
2	- Met Scott from Oxford so he could install a gas meter in a m/h. Located and uncovered m/h.
3	4/5/2016 - Cleaned up pumpstations inside and out. Met with Scott so he could retrieve his gas meter from Oxford line.
4	4/6/2016 - Investigated unmapped line on Ward St for future cleaning purposes. Cleaned out collections garage.
5	4/8/2016 - Put pump in East contact tank and ran hoses for drainage. Tested pump. Walked Webb Rd easement to investigate
6	flow direction and pull lids. Multiple lid locking mechanisms are stuck in the unlocked position.
7	4/11/2016 - Helped hose the walls and floor of the East Contact tank. Worked on both power washers and met with Scott again.
8	4/12/2016 - Checked on pump stations due to high amounts of rain. Set up area around Contact tank to transfer pump.
9	4/13/2016 - Transferred pump from East to West Contact tank for drainage and ran hoses.
10	4/14/2016 - Hosed walls and floors of the West Contact tank.
11	4/15/2016 - Jetted drain line in basement of the plant and CCTVed line to ensure it was free of debris. Met Scott to retrieve gas meter.
12	4/18/2016 - Adjusted #2 pump at Hopbrook due to leaking seal. Pulled #2 pump at Platts Mill to de-rag and clean.
13	4/19/2016 - Took sander off F550 and prepped it for storage. Hosed down Ash lagoons. Installed new battery at Maple/May.
14	4/20/2016 - Hosed down ash lagoons. Picked up pump/hoses from Superior and set up to drain the North Primary tank.
15	4/21/2016 - Cleaned rental pump and hoses used in Primary tank. Brought back to Superior. Hosed down Ash lagoons.
16	4/25/2016 - Set up Vac Truck and hoses to vacuum out Primary collector. 1 load. Vac Truck blower started making bad noises.
17	The cyclone was pulled off to inspect blower. The blower lobes were scraped down and lubed. Oils were changed.
18	4/27/2016 - Started putting the blower assembly back together on the Vac truck.
19	4/28/2016 - Finished the blower project on the Vac truck. Lubed pressure relief valves on cyclone.
20	4/29/2016 - Fixed noisey lid on Tyler Hill. Put rubber gasket on input side of blower.
21	
22	
23	

VEOLIA

Sent Certified mail #7014 1200 0002 2237 0179 on May 10, 2016

Municipal Wastewater Monitoring Coordinator
Connecticut Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127

May 10, 2016

Re: April 2016 Reports for Naugatuck, CT WPCF, NPDES # CT0100641

Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report* for April 2016. The *Nutrients Analysis Report for Compliance with General Permit for Nitrogen Discharges* and the *Discharge Monitoring Report* were submitted electronically. There were no exceptions to the reports.

Also enclosed is a summary of sludge sources received at this facility during the Month of April 2016.

Please contact me if you have any questions regarding the enclosed revised report.

Sincerely,
Veolia Water North America – Northeast, LLC

Christopher Makuch
Assistant Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck
(Enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

Naugatuck WPCF | **Facility ID: 088-001** | Date received: (stamped)

Sample month/year April, 2016 | **Permit #: CT0100641**

	Daily Flow			Primary Sludge			Aeration Tank #1				Return Sludge		Aeration Tank #2				Return Sludge		Waste Sludge	Dry Solids to Incineration	Waste Accepted		CBOD (5-Day)		
	Max.	Min.	Total	Vol.	% solids	wt.	MLSS	SVI	High D.O.	Low D.O.			MLSS	SVI	High D.O.	Low D.O.	% Flow	%Solids			Septic	Indust	Inf.	Prim eff.	Final eff.
Units		mgd		MG		lbs.			mg/l		% Flow	% Solids			mg/l				lbs	lbs	gal	gal	mg/l		
Freq.		Daily		Work Day			Work Day		4/ work day				Work Day		4/Work Day		Work Day		Wk Day	Wk Day	Work Day		3/week		
1	5.8	3.5	4.8	0.459			4,844	114	2.8	0.9	203	0.84	5,568	113	1.8	1.2	203	0.96	3,062	0	25,750				
2	6.8	3.3	5.1	0.455					4.8	0.8	177				5.0	1.0	177		3,062	0	5,000				
3	6.5	1.1	3.8	0.289					2.7	0.7	254				2.6	1.0	254		3,062	0	0				
4	5.1	3.8	4.3	0.449			4,992	112	2.7	0.7	228	0.83	6,904	93	2.6	1.0	228	0.80	2,773	0	20,500		150	190	<4
5	5.2	4.0	4.4	0.448			4,780	100	2.9	0.7	214	0.78	5,700	102	2.9	1.1	214	0.85	2,773	0	37,500		120		<4
6	5.5	3.9	4.6	0.459			4,680	103	2.9	0.7	207	0.87	6,236	103	2.9	1.1	207	0.88	2,977	0	44,050		140		<4
7	9.9	4.0	5.9	0.465			4,872	115	2.6	0.8	167	0.83	5,936	123	2.4	1.0	167	0.89	2,926	0	34,100				
8	7.3	3.2	5.7	0.466			5,036	99	4.5	0.6	171	0.84	5,380	125	3.5	0.8	171	0.82	2,824	0	34,070				
9	7.1	4.0	5.4	0.464					5.0	0.9	179				2.7	1.5	179		2,824	0	5,000				
10	7.4	3.7	5.3	0.448					5.0	0.6	165				3.2	1.1	165		2,824	0	4,000				
11	6.6	4.0	5.3	0.459			4,232	151	5.0	1.0	198	0.81	5,188	146	5.0	1.6	198	0.74	857	0	43,300		140	100	<4
12	6.8	3.8	5.3	0.470			4,780	142	4.9	0.7	203	0.80	5,852	130	2.7	1.2	203	0.77	1,736	0	35,500		130		<4
13	6.8	4.2	5.3	0.457			5,300	115	5.0	0.6	174	0.89	6,836	107	2.4	1.0	174	0.92	4,350	0	56,500		120		<4
14	6.8	3.9	5.6	0.442			8,056	62	3.6	0.8	172	0.87	5,976	105	2.9	0.6	172	0.83	5,785	0	37,100				
15	6.5	0.4	5.0	0.439			7,088	96	4.8	0.7	201	0.93	6,452	107	2.9	1.3	201	0.85	6,057	0	32,000				
16	6.8	3.8	5.0	0.435					3.2	0.7	191				2.0	1.1	191		6,057	0	8,750				
17	6.0	3.3	4.8	0.437					5.0	0.7	204				2.8	1.1	204		6,057	0	1,000		150	150	<4
18	6.7	3.3	5.0	0.439			5,180	100	2.9	0.7	194	0.87	5,876	111	2.0	1.0	194	0.90	6,023	0	43,550		360		<4
19	6.8	3.5	4.8	0.440			4,372	146	2.5	0.7	204	0.79	5,316	134	2.1	1.0	204	0.77	6,635	0	44,000		240		<4
20	6.3	1.5	4.6	0.284			4,360	126	2.3	0.8	217	0.85	6,128	121	2.0	0.9	217	0.71	3,981	0	46,350				
21	6.0	3.8	4.9	0.548			4,628	151	5.0	0.5	206	0.84	5,376	145	2.2	0.7	206	0.77	5,478	0	40,750				
22	5.8	3.6	4.8	0.539			4,600	146	2.4	1.0	191	0.82	5,716	136	2.1	0.6	191	0.80	5,512	0	44,500				
23	5.9	3.7	4.8	0.514					2.6	0.7	221				2.0	1.0	221		5,512	0	5,250				
24	6.0	2.9	4.6	0.538					5.0	0.7	196				5.0	1.1	196		5,512	0	0				
25	6.2	3.1	4.8	0.537			4,668	137	5.0	0.7	221	0.69	6,148	127	5.0	1.1	221	0.80	5,070	0	56,800		200	250	<4
26	5.8	3.5	5.1	0.519			4,840	136	2.3	0.5	170	0.78	6,260	121	1.9	0.9	170	0.89	7,103	0	50,850		350		<4
27	5.9	3.3	4.8	0.519			5,700	98	2.4	0.6	222	0.89	6,640	105	2.1	0.9	222	0.90	7,614	0	43,750		200		<4
28	6.0	3.3	4.8	0.530			4,696	155	2.7	0.7	198	0.84	5,556	149	2.6	0.2	198	0.90	7,105	0	36,540				
29	6.3	3.1	4.7	0.513			4,252	151	2.7	0.7	173	0.78	5,632	138	2.6	0.2	173	0.88	7,625	0	46,000				
30	6.4	3.5	4.6	0.517					3.9	0.7	227				2.4	1.4	227		6,637	0	11,750				
Total	193.0	100.0	147.89																						
Ave.	6.4	3.3	4.93	0.466			5,046	122	3.6	0.7	198	0.84	5,937	121	2.8	1.0	0.83	0.84	4,661	0	29,807		192	173	4

	Suspended Solids			Settleable Solids	Turbidity	Chlorine Dose		Chlorine Residual		Chlorine Residual Average	Fecal Coliform	E. Coli	Ammonia			Nitrite			Nitrate			TKN		
	Inf.	Prim Eff.	Final Eff.	Eff.	Eff.			high	low				Inf.	Prim Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.
Units	mg/l			ml/l	NTU	lbs	mg/l	mg/l		mg/l	#/100ml	#/100ml	mg/l			mg/l			mg/l			mg/l		
Freq.	3/week			Wk Day	Wk Day	4/Work Day		4/work day		4/wk day	3/week	See table A of permit	3/week	Mthly	3/wk	Monthly			Monthly			Monthly		
1				0.0	2.7	0.00	0.00																	
2						0.00	0.00																	
3						0.00	0.00																	
4	310	230	11	0.0	3.1	0.00	0.00						18.80	29.3	<0.05	0.580	<0.010	<0.010	0.15	<0.02	2.930	32.20	42.40	1.520
5	220		<5	0.0	4.2	0.00	0.00						17.40		0.14	0.560		<0.010	0.28		2.750	34.20		1.880
6	160		<5	0.0	3.3	0.00	0.00						16.80		0.09	<0.010		<0.010	<0.02		3.050	29.40		1.490
7				0.0	2.3	0.00	0.00																	
8				0.0	3.4	0.00	0.00																	
9						0.00	0.00																	
10						0.00	0.00																	
11	290	140	<5	0.0	3.0	0.00	0.00						18.40		0.06	0.160		<0.010	0.95		2.320	30.20		1.280
12	220		<5	0.0	3.3	0.00	0.00						16.40		0.10	0.450		<0.010	0.27		2.210	34.10		1.420
13	160		<5	0.0	3.5	0.00	0.00						15.30		0.24	0.450		0.030	0.09		3.260	33.70		2.220
14				0.0	6.6	0.00	0.00																	
15				0.0	4.5	14.19	0.34																	
16						32.02	0.76	0.000	0.000															
17	300	350	<5			53.18	1.34	0.040	0.000	0.018			18.40		0.11	0.240		0.010	0.21		2.170	33.60		1.820
18	1,200		<5	0.0	3.7	93.71	2.25	0.040	0.010		60		25.20		0.09	0.060		<0.010	<0.02		2.570	60.20		1.500
19	670		5	0.0	2.6	98.86	2.45	0.050	0.010		60		23.60		0.20	0.010		0.010	<0.02		2.440	70.40		1.180
20				0.0	2.3	100.37	2.62	0.050	0.000		20													
21				0.0	2.3	103.27	2.53	0.020	0.000															
22				0.0	2.5	102.21	2.55	0.050	0.000															
23						99.08	2.48	0.050	0.030	0.037														
24						91.94	2.38	0.050	0.020	0.035														
25	500	220	<5	0.0	2.2	98.47	2.48	0.020	0.000				28.40		0.09	0.170		0.010	<0.02		2.620	56.00		1.440
26	1,800		<5	0.0	3.8	93.40	2.21	0.040	0.000		>2,000		32.00		0.13	0.240		0.010	0.02		2.670	103.00		2.020
27	510		<5	0.0	2.6	111.47	2.81	0.040	0.000	0.010	10		20.00		0.30	0.020		0.010	<0.02		2.700	46.60		1.800
28				0.0	2.1	115.62	2.89	0.050	0.000	0.035	<10													
29				2.4	1.9	116.09	2.94	0.040	0.000	0.018														
30						115.32	2.99	0.040	0.010	0.028														
Total																								
Ave.	528	235	6	0.1	3.1	47.97	1.20	0.039	0.005	0.026	49		20.89	29.3	0.13	0.246	0.010	0.012	0.17	0.02	2.641	46.97	42.40	1.631

	Total N			Total N	Low D.O.	pH		Total P			Total P	Ortho P			Temp.		Arsenic		Copper	Nickel		Selenium	
	Inf.	Prim Eff.	Final Eff.	Eff.	Eff.	Inf.	Eff.	Inf.	Prim. Eff.	Final Eff.	Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.	Inf.	Eff.
Units	mg/l			lb/d	mg/l	S.U.		mg/l			lb/d	mg/l			F		mg/l		mg/l	kg/day		kg/day	
Freq.	Monthly			Mthly	4/wk day	Work Day		Nov-March (Monthly) (April-October) 2/week			Apr - Oct	Nov-March (Monthly) (April - October) 2/week			Work day		Weekly		Mthly	Weekly		Weekly	
1					8.8	7.5	6.9								58	60							
2																							
3																							
4	32.9	42.4	4.5	161	8.9	7.7	7.0	4.30		3.48	125	1.37		2.96	56	58	<0.0040	<0.004	0.010	0.27	0.27	0.08	0.02
5	35.0		4.6	169	9.6	7.5	6.9			4.07	151			3.79	54	53							
6	29.4		4.6	176	9.1	7.4	6.9								54	55							
7					8.9	7.5	6.8								54	57							
8					9.2	7.5	6.9								56	58							
9																							
10																							
11	31.3		3.6	159	9.3	7.5	6.8			2.26	100			2.00	56	57	<0.0040	<0.004		0.43	0.23	0.10	0.02
12	34.8		3.6	159	9.0	7.4	6.9			2.22	98			2.02	56	58							
13	34.2		5.5	243	9.1	8.4	6.8								56	57							
14					9.0	7.8	6.9								55	56							
15					8.9	7.4	6.9								57	59							
16																							
17	34.1		4.0	160						2.30	91			1.86			<0.0040	<0.004		0.11	0.21	0.09	0.02
18	60.3		4.1	171	9.0	7.5	6.9			2.88	120			2.66	58	58							
19	70.4		3.6	144	8.4	7.4	6.8								59	62							
20					8.8	7.3	6.9								59	61							
21					8.7	7.4	6.9								59	59							
22					8.5	7.5	6.9								60	63							
23																							
24																							
25	56.2		4.1	164	8.4	7.7	7.1			3.53	140			3.10	62	64	<0.0040	<0.004		0.28	0.16	0.18	0.02
26	103.3		4.7	200	8.2	7.6	7.1			3.94	166			3.92	60	63							
27	46.6		4.5	180	8.4	7.2	7.0								62	61							
28					8.4	7.3	6.9								60	63							
29					8.6	7.5	7.0								62	63							
30																							
Total																							
Ave.	47.4	42.4	4.3	174	8.8	7.5	6.9	4.30		3.09	124	1.37		2.79	58.0	59.2	0.0040	0.0040	0.010	0.27	0.22	0.11	0.02

	Zinc		Alkalinity	
			Pri. Eff.	
	Inf.	Eff.		Eff.
Units	kg/day		mg/l	
Freq.	Weekly		Monthly	
1			150	70
2				
3				
4	4.08	1.191	130	80
5			130	70
6			150	90
7			140	70
8			150	60
9				
10				
11	27.35	1.622	110	60
12			150	50
13			170	70
14			150	60
15			120	80
16				
17	3.60	1.810		
18			140	80
19			140	60
20			180	80
21			140	90
22			170	80
23				
24				
25	10.25	1.518	160	60
26			190	70
27			180	80
28			180	90
29			200	80
30				
Total				
Ave.	11.32	1.535	154	73

Sludge Dispoal Location:

Please return forms to:

DEEP - Water Bureau

ATTN: Municipal Wastewater Monitoring Coordinator

Municipal Facilities

79 Elm Street

Statement of Acknowledgement

I certify under pentalty 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:

Christopher Makuch

Title:

Assistant Plant Manager

Signature:

Date: 5/10/2016

April 2016 Sludge Data

Source	Gallons	Wet Tons
Americas Styrenics	5,300	
Beacon Falls	130,000	
Bristol		112.31
Fairfield	26,000	
Heritage Village Water	45,500	
Litchfield	52,000	
Lynwood Place	26,000	
Mahopac Sludge & Septic	397,000	
New Hartford	39,000	
North Canaan	32,500	
North Haven	104,000	
Pawling	6,500	
Plymouth	78,000	
Port Chester	429,000	
Poughkeepsie	19,500	
Redding	6,500	
Rhinebeck WPCF		9.49
Ridgefield	123,500	
Seymour Cake		126.73
Southbury	130,000	
Southbury Car Wash	10,100	
Southington	396,500	
Stratford	741,000	
Thomaston Treatment	65,000	
Torrington	442,000	
Westport	124,494	
Windham	136,500	
TOTAL	**3,565,894**	**248.53**

Nutrient Analysis Report

For compliance with General Permit for Nitrogen Discharges

Facility Name: NAUGATUCK TREATMENT Co.
Permit Number: CT0100641

Month: Apr-16
Design Flow: 10.3 MGD

Final Effluent

Plant Name	Sample Date (mm/dd/yyyy)	Average Daily Flow (mgd)	TKN (mg/l)	(Nitrite + Nitrate) (mg/l)	Total Nitrogen (mg/l)	Total Nitrogen (lbs/d)
NAUGATUCK TRE.	4/4/2016	4.29	1.52	2.93	4.5	161
NAUGATUCK TRE.	4/5/2016	4.44	1.88	2.76	4.6	170
NAUGATUCK TRE.	4/6/2016	4.63	1.49	3.06	4.6	178
NAUGATUCK TRE.	4/11/2016	5.28	1.28	2.33	3.6	159
NAUGATUCK TRE.	4/12/2016	5.32	1.42	2.22	3.6	160
NAUGATUCK TRE.	4/13/2016	5.28	2.22	3.29	5.5	242
NAUGATUCK TRE.	4/17/2016	4.75	1.82	2.18	4	158
NAUGATUCK TRE.	4/18/2016	5	1.5	2.58	4.1	171
NAUGATUCK TRE.	4/19/2016	4.84	1.18	2.45	3.6	145
NAUGATUCK TRE.	4/25/2016	4.77	1.44	2.63	4.1	163
NAUGATUCK TRE.	4/26/2016	5.06	2.02	2.68	4.7	198
NAUGATUCK TRE.	4/27/2016	4.75	1.8	2.71	4.5	178
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
				Total Pounds		2083
				Average Pounds		173.5833333

Date of Last Calibration of Flow Meter: 7/2/2015

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: _____ **Title:** _____

Submitted electronically 5/10/2016

DMR Copy of Record

Permit

Permit #:	CT0100641	**Permittee:**	NAUGATUCK WPCF	**Facility:**	NAUGATUCK, BOROUGH OF
Major:	Yes	**Permittee Address:**	500 CHERRY STREET NAUGATUCK, CT 06770	**Facility Location:**	500 CHERRY STREET NAUGATUCK, CT 06770
Permitted Feature:	001 External Outfall	**Discharge:**	001-1 SANITARY SEWAGE		

Report Dates & Status

Monitoring Period:	From 04/01/16 to 04/30/16	**DMR Due Date:**	05/15/16	**Status:**	NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

First Name:	John	**Title:**	Plant Manager	**Telephone:**	203-723-1433
Last Name:	Batorski				

No Data Indicator (NODI)

Form NODI: –

Parameter Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Quality or Concentration Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00056	Flow rate	1 - Effluent Gross	0	–	Sample	=	4.9	=	9.9	03 - MGD									99/99 - Continuous	TM - TOTALZ
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Continuous	TM - TOTALZ
					Value NODI															
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	–	Sample						=	6.2					19 - mg/L		01/01 - Daily	GR - GRAB
					Permit Req.						>=	5 INST MIN					19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI															
00310	BOD, 5-day, 20 deg. C	T - See Comments	0	–	Sample										=	4	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00400	pH	1 - Effluent Gross	0	–	Sample						=	6.8			=	7.1	12 - SU		01/01 - Daily	GR - GRAB
					Permit Req.						>=	6 INST MIN			<=	9 INST MAX	12 - SU		01/01 - Daily	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	–	Sample								=	5.5	=	11	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.								<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00530	Solids, total suspended	G - Raw Sewage Influent	0	–	Sample								=	528			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.									Req Mon MO AVG			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00530	Solids, total suspended	T - See Comments	0	–	Sample										=	5	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	4	–	Sample								=	0.13			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.								<=	25 MO AVG			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00610	Nitrogen, ammonia total [as N]	T - See Comments	0	–	Sample										=	0.06	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00615	Nitrogen, nitrite total [as N]	T - See Comments	0	–	Sample										=	0.01	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00620	Nitrogen, nitrate total [as N]	T - See Comments	0	–	Sample										=	3.07	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00665	Phosphorus, total [as P]	T - See Comments	0	–	Sample										=	4.26	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00720	Cyanide, total [as CN]	T - See Comments	0	–	Sample										=	0.01	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
00722	Cyanide, free [amen. to chlorination]	T - See Comments	0	–	Sample										=	0.01	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - COMPOS
					Value NODI															
01002	Arsenic, total [as As]	1 - Effluent Gross	0	–	Sample								=	0.004	=	0.004	19 - mg/L		01/07 - Weekly	CP - COMPOS
					Permit Req.									Req Mon MO AVG		Req Mon DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
					Value NODI															
01002	Arsenic, total [as As]	G - Raw Sewage Influent	0	–	Sample										=	0.004	19 - mg/L		01/07 - Weekly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/07 - Weekly	CP - COMPOS
					Value NODI															

Submitted electronically 5/10/2016

01002	Arsenic, total [as As]	T - See Comments	0	--	Sample									=	0.004	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01002	Arsenic, total [as As]	W - See Comments	0	--	Sample										Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
					Permit Req.										C - No Discharge			
					Value NODI													
01012	Beryllium, total [as Be]	T - See Comments	0	--	Sample									=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01027	Cadmium, total [as Cd]	T - See Comments	0	--	Sample									=	0.0001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01032	Chromium, hexavalent [as Cr]	T - See Comments	0	--	Sample									=	0.01	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01034	Chromium, total [as Cr]	T - See Comments	0	--	Sample									=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01042	Copper, total [as Cu]	1 - Effluent Gross	0	--	Sample									=	0.01	19 - mg/L	01/30 - Monthly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
					Value NODI													
01042	Copper, total [as Cu]	T - See Comments	0	--	Sample									=	0.007	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01045	Iron, total [as Fe]	T - See Comments	0	--	Sample									=	0.05	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01051	Lead, total [as Pb]	T - See Comments	0	--	Sample									=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01059	Thallium, total [as Tl]	T - See Comments	0	--	Sample									=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01067	Nickel, total [as Ni]	1 - Effluent Gross	0	--	Sample	=	0.22	=	0.27	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.	<=	2.14 MO AVG	<=	3.94 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01067	Nickel, total [as Ni]	G - Raw Sewage Influent	0	--	Sample			=	0.43	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.				Req Mon DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01067	Nickel, total [as Ni]	T - See Comments	0	--	Sample									=	0.018	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01067	Nickel, total [as Ni]	W - See Comments	0	--	Sample										Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
					Permit Req.										C - No Discharge			
					Value NODI													
01077	Silver, total [as Ag]	T - See Comments	0	--	Sample									=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01092	Zinc, total [as Zn]	1 - Effluent Gross	0	--	Sample	=	1.535	=	1.81	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.	<=	3.79 MO AVG	<=	5.68 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01092	Zinc, total [as Zn]	G - Raw Sewage Influent	0	--	Sample			=	27.35	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.				Req Mon DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01092	Zinc, total [as Zn]	T - See Comments	0	--	Sample									=	0.08	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01097	Antimony, total [as Sb]	T - See Comments	0	--	Sample									=	0.01	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01105	Aluminum, total [as Al]	T - See Comments	0	--	Sample									=	0.02	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
01147	Selenium, total [as Se]	1 - Effluent Gross	0	--	Sample	=	0.02	=	0.02	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.	<=	35 MO AVG	<=	76 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01147	Selenium, total [as Se]	G - Raw Sewage Influent	0	--	Sample		0.11			01 - kg/d							01/07 - Weekly	CP - COMPOS
					Permit Req.		Req Mon MO AVG			01 - kg/d							01/07 - Weekly	CP - COMPOS
					Value NODI													
01147	Selenium, total [as Se]	T - See Comments	0	--	Sample									=	0	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Value NODI													
46000	Phenols	T - See Comments	0	--	Sample									=	0.02	19 - mg/L	01/90 - Quarterly	CP - COMPOS
					Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS

					Value NODI														
50060	Chlorine, total residual	T - See Comments	0	–	Sample							=	0.03	19 - mg/L	01/90 - Quarterly	CP - COMPOS			
					Permit Req.								Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS			
					Value NODI														
71900	Mercury, total [as Hg]	T - See Comments	0	–	Sample							=	0.0002	19 - mg/L	01/90 - Quarterly	CP - COMPOS			
					Permit Req.								Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS			
					Value NODI														
80128	BOD, carbonaceous [5 day, 5 C]	1 - Effluent Gross	0	–	Sample							=	4	=	4	19 - mg/L	03/07 - Three Per Week	CP - COMPOS	
					Permit Req.							<=	25 MO AVG	<=	40 DAILY MX	19 - mg/L	03/07 - Three Per Week	CP - COMPOS	
					Value NODI														
80128	BOD, carbonaceous [5 day, 5 C]	G - Raw Sewage Influent	0	–	Sample							=	192			19 - mg/L	03/07 - Three Per Week	CP - COMPOS	
					Permit Req.								Req Mon MO AVG			19 - mg/L	03/07 - Three Per Week	CP - COMPOS	
					Value NODI														
80128	BOD, carbonaceous [5 day, 5 C]	T - See Comments	0	–	Sample							=	4			19 - mg/L	01/90 - Quarterly	CP - COMPOS	
					Permit Req.								Req Mon DAILY MX			19 - mg/L	01/90 - Quarterly	CP - COMPOS	
					Value NODI														
81011	Solids, suspended percent removal	K - Percent Removal	0	–	Sample														
					Permit Req.	=	98.6									23 - %	03/07 - Three Per Week	CA - CALCTD	
					Value NODI	>=	85 MN % RMV									23 - %	03/07 - Three Per Week	CA - CALCTD	
81383	Carbonaceous oxygen demand, % removal	K - Percent Removal	0	–	Sample														
					Permit Req.	=	98									23 - %	03/07 - Three Per Week	CA - CALCTD	
					Value NODI	>=	85 MN % RMV									23 - %	03/07 - Three Per Week	CA - CALCTD	
TDA3D	Nosel Static 48Hr Acute D. Pulex	T - See Comments	0	–	Sample														
					Permit Req.	=	110									2T - % survival	01/90 - Quarterly	CP - COMPOS	
					Value NODI	>=	90 MINIMUM									2T - % survival	01/90 - Quarterly	CP - COMPOS	
TDA6C	Nosel Static 48Hr Acute Pimephales	T - See Comments	0	–	Sample														
					Permit Req.	=	110									2T - % survival	01/90 - Quarterly	CP - COMPOS	
					Value NODI	>=	90 MINIMUM									2T - % survival	01/90 - Quarterly	CP - COMPOS	

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

NAUGATUCK WPCF

User: chris.makuch@veoliawaterna.com

Name: Christopher Makuch

E-Mail: chris.makuch@veoliawaterna.com

Date/Time: 2016-05-10 08:01 (Time Zone: -04:00)

VEOLIA

Sent Certified mail #7014 1200 0002 2236 9982 on April 19, 2016

Municipal Wastewater Monitoring Coordinator
Connecticut Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127

April 19, 2016

Re: March 2016 Reports for Naugatuck, CT WPCF, NPDES # CT0100641

Dear Sir/Madam:

Enclosed please find the revised MOR for March 2016. The Selenium for March 30th is the only change and is highlighted in yellow on page 3. The Influent and Effluent Selenium analyticals were not available at the time of that report.

Please contact me if you have any questions regarding the enclosed revised report.

Sincerely,
Veolia Water North America – Northeast, LLC

Christopher Makuch
Assistant Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck
(Enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

Naugatuck WPCF **Facility ID: 088-001** Date received: (stamped)

Sample month/year March, 2016 **Permit #: CT0100641** **Page1 of 4 of MOR for Naugatuck WPCF**

	Daily Flow			Primary Sludge			Aeration Tank #1				Return Sludge		Aeration Tank #2				Return Sludge		Waste Sludge	Dry Solids to Incineration	Waste Accepted		CBOD (5-Day)		
	Max.	Min.	Total	Vol.	% solids	wt.	MLSS	SVI	High D.O.	Low D.O.			MLSS	SVI	High D.O.	Low D.O.	% Flow	%Solids			Septic	Indust	Inf.	Prim eff.	Final eff.
Units	mgd			MG		lbs.			mg/l		% Flow	% Solids			mg/l				lbs	lbs	gal	gal	mg/l		
Freq	Daily			Work Day			Work Day		4/ work day				Work Day		4/Work Day		Work Day		Wk Day	Wk Day	Work Day		3/week		
1	7.4	4.7	6.3	0.420			6,816	62	3.0	1.0	159	0.99	8,408	65	2.6	0.2	159	1.29	5,819	0	19,500		100	86	<4
2	8.1	5.3	6.6	0.413			4,356	112	3.0	1.0	182	1.05	5,740	105	3.8	0.2	182	1.23	7,758	0	8,000				
3	7.3	4.6	6.2	0.394			4,408	70	3.0	0.9	124	0.88	6,648	87	2.2	0.9	124	0.43	4,458	0	28,500				
4	7.1	4.5	6.1	0.386			4,616	71	3.0	0.9	158	1.02	6,808	65	2.1	0.9	158	0.93	6,635	0	9,000				
5	7.2	4.5	5.9	0.410					3.0	0.7	167				2.2	0.5	167		4,562	0	4,000				
6	6.9	4.0	5.6	0.453					5.0	0.8	193				5.0	0.9	193		6,635	0	1,000		73		<4
7	6.8	3.8	5.6	0.437			4,796	85	3.3	1.0	159	0.94	7,604	83	2.2	0.8	159	0.83	6,023	0	27,250		140		<4
8	6.8	3.9	5.9	0.441			6,412	72	3.0	0.8	173	0.83	7,512	87	2.1	0.8	173	0.88	5,819	0	26,250		85	130	<4
9	11.9	3.6	6.5	0.445							149	0.76	8,096	79	2.7	0.5	149	1.02	12,114	0	17,250				
10	7.8	5.0	6.3	0.403							143	0.88	7,468	78	2.1	1.0	143	1.37	19,140	0	22,500				
11	6.3	1.1	3.7	0.374							269	1.25	6,944	104	2.0	0.9	269	0.91	5,512	0	29,500				
12	8.4	1.5	4.8	0.438							161				2.0	1.0	161		11,025	0	3,000				
13	6.2	3.4	5.1	0.439					2.5	1.2	132				2.1	1.0	132		11,025	0	0				
14	3.6	6.4	5.2	0.434			1,880	74	2.5	1.2	144	0.72	7,464	60	2.5	1.1	144	1.13	3,934	0	28,750		120		<4
15	6.6	4.0	5.4	0.469			2,304	87	5.0	0.8	129	0.76	3,916	115	5.0	0.3	129	1.16	0	0	26,750		480		<4
16	6.3	3.7	5.1	0.478			4,192	62	2.5	1.3	141	0.79	6,508	69	3.7	1.1	141	0.94	0	0	39,250		190	120	<4
17	6.6	3.8	5.3	0.477			4,440	72	2.6	1.3	129	0.66	5,652	85	4.2	1.1	129	1.18	0	0	31,750				
18	6.3	3.5	5.1	0.476			3,352	98	5.0	1.0	146	0.67	3,900	154	5.0	1.0	146	1.16	0	0	25,000				
19	6.3	3.3	4.9	0.477					2.6	1.1	145				2.8	0.9	145		0	0	10,500				
20	6.3	3.3	4.9	0.471					2.7	1.0	149				2.4	1.1	149		0	0	0				
21	6.1	1.7	4.4	0.420			3,636	77	2.7	1.0	189	0.72	5,104	114	2.4	1.1	189	1.21	0	0	24,500		260		<4
22	5.8	3.1	4.8	0.475			5,096	84	2.6	1.1	217	0.75	5,632	107	2.4	0.5	217	0.50	1,063	0	31,000		130		<4
23	5.9	3.5	4.9	0.467			3,144	86	2.6	1.1	199	0.78	5,912	85	2.9	0.5	199	0.80	1,344	0	24,000		99	130	<4
24	6.0	3.5	4.8	0.476			3,888	116	5.0	0.7	205	0.79	4,436	77	5.0	0.6	205	0.63	604	0	26,750				
25	6.5	3.5	4.9	0.466			4,708	85	2.8	0.4	196	0.82	5,352	88	4.4	0.2	196	0.64	621	0	16,250				
26	6.4	3.3	4.7	0.478					3.3	0.7	203				2.8	0.7	203		621	0	13,000				
27	6.0	2.8	4.5	0.473					3.3	0.7	216				2.8	0.7	216		621	0	0				
28	6.5	3.1	5.2	0.487			4,236	116	3.6	1.2	186	0.83	6,256	96	2.6	1.1	186	0.90	1,104	0	24,050		260		<4
29	6.2	3.4	5.0	0.461			4,264	117	3.0	0.8	193	0.88	6,496	100	2.7	1.2	193	1.22	1,786	0	34,500		170		<4
30	6.1	3.9	4.9	0.466			5,532	99	3.0	0.7	196	0.89	6,352	87	2.8	1.0	196	0.93	2,322	0	32,000		140	160	<4
31	6.3	3.3	4.9	0.437			4,724	114	2.9	0.8	199	0.87	4,664	142	2.2	0.5	199	0.84	2,909	0	26,500				
Total	208.0	113.0	163.46				4,724												123,455	0	610,300				
Ave.	6.7	3.6	5.27	0.446			4,340	88	3.2	0.9	173	0.91	6,212	93	3.0	0.8	0.85	0.96	3,982	0	19,687		173	125	4

Page 1 No Corrections

Page 2 of 4 of MOR for Naugatuck WPCF

	Suspended Solids			Settleable Solids	Turbidity	Chlorine Dose		Chlorine Residual		Chlorine Residual Average	Fecal Coliform	E. Coli	Ammonia			Nitrite			Nitrate			TKN		
	Inf.	Prim Eff.	Final Eff.	Eff.	Eff.			high	low				Inf.	Prim Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.
Units	mg/l			ml/l	NTU	lbs	mg/l	mg/l		mg/l	#/100ml	#/100ml	mg/l			mg/l			mg/l			mg/l		
Freq.	3/week			Wk Day	Wk Day	4/Work Day		4/work day		4/wk day	3/week	See table A of permit	3/week	Mthly	3/wk	Monthly			Monthly			Monthly		
1	220	64	<5	0.0	1.9	0.00	0.00						15.30	20.8	2.20	0.060	0.070	0.070	0.52	0.16	2.040	27.00	28.50	3.210
2				0.0	3.0	0.00	0.00																	
3				0.0	12.6	0.00	0.00																	
4				0.0	4.1	0.00	0.00																	
5						0.00	0.00																	
6	130		<5			0.00	0.00						15.20		4.44	0.200		0.090	1.33		2.630	24.30		5.740
7	210		<5	0.0	1.9	0.00	0.00						17.00		2.12	0.190		0.100	1.30		2.780	28.60		3.630
8	190	140	<5	0.0	2.1	0.00	0.00						14.60		0.81	0.220		0.080	0.90		2.510	26.60		2.020
9				0.0	2.3	0.00	0.00																	
10				0.0	2.8	0.00	0.00																	
11				0.0	3.4	0.00	0.00																	
12						0.00	0.00																	
13						0.00	0.00																	
14	180		<5	0.0	1.9	0.00	0.00						18.60		0.62	0.210		0.130	0.11		2.700	32.10		2.270
15	1,100		<5	0.0	1.8	0.00	0.00						19.10		0.42	0.170		0.080	0.17		2.610	37.20		1.610
16	300	240	<5	0.0	2.8	0.00	0.00						19.30		0.94	0.020		0.150	<0.02		2.250	34.10		2.330
17				0.0	2.4	0.00	0.00																	
18				0.0	2.9	0.00	0.00																	
19						0.00	0.00																	
20						0.00	0.00																	
21	450		<5	0.0	1.7	0.00	0.00						19.40		0.26	0.140		0.060	0.65		2.430	35.70		1.770
22	310		<5	0.0	1.8	0.00	0.00						16.00		0.50	0.010		0.100	<0.02		2.820	27.20		1.780
23	220	140	<5	0.0	2.2	0.00	0.00						19.60		0.16	0.010		0.040	<0.02		2.380	36.70		1.130
24				0.0	1.9	0.00	0.00																	
25				0.0	2.7	0.00	0.00																	
26						0.00	0.00																	
27						0.00	0.00																	
28	420		<5	0.0	2.3	0.00	0.00						20.40		0.11	0.030		0.010	<0.02		2.080	43.00		1.330
29	260		<5	0.0	3.9	0.00	0.00						19.50		<0.05	0.030		0.010	<0.02		2.410	32.70		1.050
30	230	120	<5	0.0	3.3	0.00	0.00						21.00		0.16	0.020		0.020	<0.02		2.440	33.40		1.060
31				0.0	2.7	0.00	0.00																	
Total																								
Ave.	325	141	5	0.0	3.0	0.00	0.00						18.08	20.8	0.98	0.101	0.070	0.072	0.39	0.16	2.468	32.20	28.50	2.225

Page 2 No Corrections

	Total N			Total N	Low D.O.	pH		Total P			Total P	Ortho P			Temp.		Arsenic		Copper	Nickel		Selenium	
	Inf.	Prim. Eff.	Final Eff.	Eff.	Eff.	Inf.	Eff.	Inf.	Prim. Eff.	Final Eff.	Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.	Inf.	Eff.
Units	mg/l			lb/d	mg/l	S.U.		mg/l			lb/d	mg/l			F		mg/l		mg/l	kg/day		kg/day	
Freq.	Monthly			Mthly	4/wk day	Work Day		Nov-March (Monthly) (April-October) 2/week			Apr - Oct	Nov-March (Monthly) (April - October) 2/week			Work day		Weekly		Mthly	Weekly		Weekly	
1	27.6	28.7	5.3	278	8.9	7.3	6.7	2.79		1.26	66	1.24		1.13	54	55	<0.0040	<0.004	0.009	0.30	0.12	0.12	0.02
2					8.2	7.2	6.8								56	57							
3					9.2	7.3	6.8								54	51							
4					9.2	7.3	6.8								53	54							
5																							
6	25.8		8.5	397						2.28	107			1.87									
7	30.1		6.5	304	8.9	7.3	6.8									55							
8	27.7		4.6	223	9.0	7.3	6.7			1.62	79			1.47	55	56	<0.0040	<0.004		0.06	0.11	1.10	0.22
9					8.6	7.4	6.7								56	57							
10					7.7	7.3	6.7								57	59							
11					8.4	7.4	6.8								56	59							
12																							
13																							
14	32.4		5.1	221	8.9	7.7	7.0			2.59	112			2.31	57	58							
15	37.5		4.3	194	9.1	7.6	7.0								57	57							
16	34.1		4.7	200	8.6	7.6	6.9			3.15	134			2.98	59	57	<0.0040	<0.004		0.17	0.13	0.10	0.02
17					9.0	7.4	6.8								56	58							
18					9.1	7.3	6.7								56	58							
19																							
20																							
21	36.5		4.3	158	9.2	7.7	6.8			2.65	97			2.48	56	56							
22	27.2		4.7	188	9.0	7.5	6.9								56	57							
23	36.7		3.6	147	9.1	7.5	6.9			2.80	114			2.48	56	58	<0.0040	<0.004		0.34	0.71	0.09	0.02
24					9.2	6.7	6.9								58	56							
25					9.1	7.5	6.9								55	57							
26																							
27																							
28	43.1		3.4	147	9.1	7.6	6.9			1.86	80			1.71	56	58							
29	32.8		3.5	146	9.1	7.4	6.7								57	58							
30	33.4		3.5	143	8.8	7.4	6.9			2.50	103			2.26	58	59	<0.0040	<0.004		0.22	0.38	0.09	0.02
31					9.1	7.3	6.8								58	59							
Total																							
Ave.	32.7	28.7	4.8	211	8.9	7.4	6.8	2.79		2.30	99	1.24		2.08	56.2	56.9	0.0040	0.0040	0.009	0.22	0.29	0.30	0.06

Page 3 One correction

Page 4 of 4 of MOR for Naugatuck WPCF

	Zinc		Alkalinity		Sludge Dispoal Location:
			Pri. Eff.		
	Inf.	Eff.		Eff.	Please return forms to:
Units	kg/day		mg/l		DEEP - Water Bureau
Freq.	Weekly		Monthly		ATTN: Municipal Wastewater Monitoring Coordinator
1	2.27	2.108	100	70	Municipal Facilities
2			110	60	79 Elm Street
3			110	70	
4			120	60	
5					Statement of Acknowledgement
6					
7			120	60	I certify under pentalty of law that this document
8	2.84	1.797	120	50	and all attachments were prepared under my
9			140	60	direction or supervision in accordance with a
10			140	70	system designed to assure that qualified
11			150	60	personnel properly gather and evaluate the
12					information submitted. Based on my inquiry
13					of the person or persons who manage the
14			130	60	system, or those persons directly responsible
15			150	60	for gathering the information, the information
16	6.76	1.227	120	70	submitted is, to the best of my knowledge and
17			170	60	belief, true, accurate, and complete. I am aware
18			140	60	that there are significant penalties for submitting
19					false information including the possibility of fine
20					and imprisonment for knowing violations.
21			150	70	
22			150	60	Authorized Official:
23	6.13	1.520	170	80	Christopher Makuch
24			150	70	Title:
25			160	80	Assistant Plant Manager
26					
27					Signature:
28			150	60	
29			150	60	Date: 4/19/2016
30	4.02	1.426	140	60	
31			180	70	
Total					
Ave.	4.40	1.615	140	64	

Page 4 No Corrections

VEOLIA
WATER

Sent Certified R.R.R. mail #7009 2820 0004 1018 1559 on April 29, 2016

Connecticut Department of Energy and Environmental Protection
Bureau of Water Management
Aquatic Toxicity Monitoring
79 Elm Street
Hartford, CT 06106-5127

April 29, 2015

Re: Aquatic Toxicity Monitoring Report, 2nd Quarter 2016

To Whom It May Concern:

Enclosed please find the Naugatuck second quarter Aquatic Toxicity Monitoring Report for 2016.

Please contact me if you have any questions regarding the enclosed report.

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck
(enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

New England Bioassay, a Division of GZA GeoEnvironmental, Inc.
www.nebio.com

Aquatic Toxicity Monitoring Report (ATMR)
Instruction Form –Municipal

New England Bioassay
a Division of GZA GeoEnvironmental, Inc.

77 Batson Drive
Manchester, CT
06042
860-643-9560
FAX 860-646-7169

Client Name/Project: Phoenix – Veolia Naugatuck Test Date: 4/8/16

Sample ID: BM 08825

Your aquatic toxicity results were as follows:

☒ Pass

☐ Fail. Please proceed according to the instructions in the "Recording and Reporting of Violations" Section of your permit.

☐ Monitoring Only

☐ Invalid – **Retesting is required within 30 days.** Please proceed according to the instructions in the "Recording and Reporting of Violations" Section of your permit.

☐ Unable to determine using the information available. Please compare results to your permit limits. Please submit a current copy of your permit to the New England Bioassay Laboratory so that we may accurately determine the status of your test results in the future and so that we can confirm that test protocols comply with your permit requirements.

Please complete the items on this bulleted list prior to submission of these data to the CTDEEP:

- Complete Part 3 of the ATMR, including the sample day's flow.
- An authorized official from your facility must sign Part 1 of the ATMR.
- Complete the facility and sample collection section at the top of all pages of the ATMR.

Please detach this instruction form, then file your completed ATMR with the CTDEEP.

Questions? Please contact the Lab Manger, Kim Wills at (860) 858-3153 or kimberly.wills@gza.com

NEW ENGLAND BIOASSAY

ATMR COVER SHEET

CLIENT: Phoenix Environmental Laboratories
ADDRESS: 587 East Middle Turnpike
P.O. Box 370
Manchester, CT 06040

SAMPLE: Naugatuck WPCF

D.pulex **TEST ID #:** 16-501a
P.promelas **TEST ID #:** 16-501b
COC #: C36-1747
PROJECT #: 05.0044745.00

RECEIVED ON: 4/8/16

LABORATORY CONTROL WATER

NEB Lot #:	A36-S004	SRCF
Hardness:	46	mg/L as $CaCO_3$
Alkalinity:	30	mg/L as $CaCO_3$

SAMPLE COLLECTION INFORMATION

DATE(s): 4-6-16 to 4/7/16
TIME(s): 1:30 am to 1:35 am

INITIAL CHEMISTRY DATA				TECHNICIAN INITIALS:	CW
Color	light yellow	Temp. (°C)	3.9	Hardness (mg/L)	88
Cond. (µmhos/cm)	719	D.O.(mg/L)	9.3	Alkalinity (mg/L)	55
Salinity (ppt)	< 1	pH (su)	7.0	TRC (mg/L)	<0.02

INVERTEBRATE

Test Set Up Technician Initials: KO
Test Type: Screen
Test Species: *Daphnia pulex*
Source: New England Bioassay
NEB Lot#: Dp16 (4-8)
Age: < 24 Hours
Test Solution Volume: 30 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 4/8/16 AT 1550
END DATE: 4/10/16 AT 1450

VERTEBRATE

Test Set Up Technician Initials: KO
Test Type: Screen
Test Species: *Pimephales promelas*
Source: New England Bioassay
NEB Lot#: Pp16 (3-25) 1545
Age: 14 (1-14)Days
Test Solution Volume: 700 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 4/8/16 AT 1457
END DATE: 4/10/16 AT 1457

TEST SET UP CONDUCTIVITIES

D.p Control	176	µmhos/cm	*P.p* Control	176	µmhos/cm
100%	727	µmhos/cm	100%	727	µmhos/cm

RESULTS OF *Daphnia pulex* Screening Test

Control:	100.0 %	100%	100	%
Replicate A:	100 %			
Replicate B:	100 %			
Replicate C:	100 %			

RESULTS OF *Pimephales promelas* Screening Test

Control:	100.0 %	100%	100	%
Replicate A:	100 %			
Replicate B:	100 %			
Replicate C:	100 %			

COMMENTS:

REVIEWED BY: [signature] DATE: 4/20/16

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Receiving Water:	Naugatuck River	Waterbody ID:	6900
Sample Collection Date (s):	4/6/16 to 4/7/16		
Sample Collection Time (s):	1:10pm to 1:35pm		

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% SURVIVAL)

TEST SPECIES	REPLICATE 1	REPLICATE 2	REPLICATE 3
Daphnia pulex	100	100	100
Pimephales promelas	100	100	100

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 DEEP.

EFFLUENT SAMPLE RESULTS (MEAN % SURVIVAL)

TEST SPECIES	100% Effluent
Daphnia pulex	100
Pimephales promelas	100

For Official Use Only

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 submitted false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Official: John Batarski Title: Plant Manager

Signature: John Batarski Date: 4-29-16

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Dilution Water:	Soft Reconstituted Freshwater (SRCF)	Hardness:	50 ± 5
Sample Collected On:	4/7/16 (date)	Sample Received On:	4/8/16 (date)
Test Species:	*Daphnia pulex*	Source:	New England Bioassay
Test Duration:	48 hours	Beginning:	1550
		Ending:	1450
		Age:	<24 hours
		On:	4/8/16 (date)
		On:	4/10/16 (date)

Effluent Dilution (%)	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (SU)		
Tech Initials	KO	PD	MV	KO	PD	MV	KO	PD	MV	KO	PD	MV
Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	10	9.3	8.9	8.3	20	21	20	7.2	7.9	7.8
100% B	10	10	10			8.2			20			7.8
100% C	10	10	10			8.3			20			7.8
100% D	10	10	10			8.3			20			7.8
100% E	10	10	10			8.3			20			7.8
Control 1	10	10	10	8.9	9.0	8.5	21	21	20	7.6	7.9	7.5
Control 2	10	10	10			8.5			20			7.5
Control 3	10	10	10			8.4			20			7.5

MEAN SAMPLE SURVIVAL (%)	CONTROL SURVIVAL (%)	# 1	# 2	# 3
[(A+B+C+D+E) / 5 X 10 = 100		100	100	100

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC50
Daphnia pulex	4/1/16	Copper Nitrate Lot #16-0311-01	NEB	2.34 µg/L

COMMENTS

Note: At test initiation (0 h) and 24 h, dissolved oxygen, temperature, and pH were measured in separate chemistry replicates (without daphnids); at test completion (or when complete mortality occurred within a replicate) dissolved oxygen, temperature, and pH were measured directly from replicates with the test organisms.

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: Kimberly Wills, New England Bioassay — Title: Laboratory Manager

Signature: — Date: 4/20/16

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Dilution Water:	Soft Reconstituted Freshwater (SRCF)	Hardness:	50 ± 5
Sample Collected On:	4/7/16 (date)	Sample Received On:	4/8/16 (date)
Test Species:	*Pimephales promelas*	Source: New England Bioassay	Age: 14 (days)
Test Duration:	48 hours	Beginning: 1457	On: 4/8/16 (date)
		Ending: 1457	On: 4/10/16 (date)

Effluent Dilution (%)	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (SU)		
Tech Initials	KO	PD	MV	KO	PD	PD	KO	PD	PD	KO	PD	PD
Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	10	9.3	7.1	7.4	20	21	20	7.2	7.4	7.2
100% B	10	10	10		7.2	7.5		21	20		7.4	7.3
100% C	10	10	10		7.2	7.6		21	20		7.4	7.3
100% D	10	10	10		7.1	7.5		21	20		7.4	7.3
100% E	10	10	10		7.4	7.5		21	20		7.4	7.3
Control 1	10	10	10	8.9	7.5	7.9	21	21	20	7.6	7.3	7.0
Control 2	10	10	10		7.6	7.9		21	20		7.4	7.0
Control 3	10	10	10		7.7	7.6		21	20		7.4	7.0

MEAN SAMPLE SURVIVAL (%)	CONTROL SURVIVAL (%)	#1	#2	#3
[(A+B+C+D+E) / 5 X 10 = 100		100	100	100

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC50
Pimephales promelas	4/1/16	Copper Nitrate Lot #16-0311-01	NEB	141.1 µg/L

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: Kimberly Wills, New England Bioassay — Title: Laboratory Manager

Signature: — Date: 4/20/16

SUPPLEMENTAL CHEMISTRY (PART 2S)

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Receiving Water:	Naugatuck River	Waterbody ID:	6900
Sample Collection Date(s):	4/6/16 to 4/7/16		
Sample Collection Time(s):	1:10 pm to 1:35 pm		

Effluent Sample At Arrival

Parameter		Effluent Sample
	Tech Initials	CW
	Date & Time	4/8/16 @ 0935
Temperature (° C)		3.9
pH (standard units)		7.0
Alkalinity (mg/L)		55
Conductivity (µS)		719
Hardness(mg/L)/Salinity (ppt)		88 / < 1
Color		light yellow
TRC (mg/L)		<0.02

100% Test Sample

Parameter		*Daphnia pulex*		*Pimephales promelas*	
	Hours	Initial (00)	Final (48)	Initial (00)	Final (48)
Tech Initials		CW	PD	CW	PD
Conductivity (µS)		727	734	727	719
Alkalinity (mg/L)		55	50	55	55
Hardness (mg/L)/Salinity (ppt)		88 / <1	90 / < 1	88 / <1	92 / < 1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

0% Test Sample (Control)

Parameter		*Daphnia pulex*		*Pimephales promelas*	
	Hours	Initial (00)	Final (48)	Initial (00)	Final (48)
Tech Initials		CW	PD	CW	PD
Conductivity (µS)		176	176	176	184
Alkalinity (mg/L)		30	30	30	35
Hardness (mg/L)/Salinity (ppt)		46 / < 1	46 / < 1	46 / < 1	46 / < 1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

Laboratory Name/Official: Kimberly Wills, New England Bioassay

Title: Laboratory Manager

Signature:

Date: 4/20/16

08825

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Water Management: Aquatic Toxicity Monitoring Report - PART 3

NPDES Permit:	CT0100641				
Facility:	Naugatuck WPCF	Exp:	~~8/7/05~~ 8/20/2019	Phone¹:	(203) 723-1433
Address:	500 Cherry Street	Contact:	~~James McGrath~~ John Bartoski	Phone²:	
		Town:	Naugatuck	Zip:	06770

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 Bartoski

Signature: [signature]

Title: Plant Manager

Date: 4-29-16

Sample Date: 4-6-16

Sample Day's Flow: 4.63

JAN (APR) JUL OCT (Circle one)

REPEAT MONTH:

FREQUENCY	MONLOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	BOD, 5 DAY		<4.0
Each Test	001 T	mg/L	SUSPENDED SOLIDS, TOTAL		<5.0
Each Test	001 T	mg/L	AMMONIA, Total		0.06
Each Test	001 T	mg/L	NITRITE, as N		<0.01
Each Test	001 T	mg/L	NITRATE, as N		3.07
Each Test	001 T	mg/L	CYANIDE, Total		<0.01
Each Test	001 T	mg/L	CYANIDE, Amenable		<0.01
Each Test	001 T	mg/L	BERYLLIUM, Total	0.001 mg/L	<0.001
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	<0.004
Each Test	001 T	mg/L	CADMIUM, Total	0.0005 mg/L	<0.0001
Each Test	001 T	mg/L	CHROMIUM, Hexavalent		<0.01

03/31/2006 15:59 FAX 2037238539 VEOLIA WATER 008

Aquatic Toxicity Monitoring Report - PART 3

FREQUENCY	MONLOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	CHROMIUM, Total		0.001
Each Test	001 T	mg/L	COPPER, Total	0.005 mg/L	0.007
Each Test	001 T	mg/L	LEAD, Total	0.005 mg/L	<0.001
Each Test	001 T	mg/L	THALLIUM, Total	0.005 mg/L	<0.001
Each Test	001 T	mg/L	NICKEL, Total		0.018
Each Test	001 T	mg/L	SILVER, Total	0.002 mg/L	<0.001
Each Test	001 T	mg/L	ZINC, Total	0.020 mg/L	0.084
Each Test	001 T	mg/L	ANTIMONY, Total		<0.005
Each Test	001 T	mg/L	SELENIUM, Total	0.005 mg/L	<0.001
Each Test	001 T	mg/L	PHENOLS		<0.015
Each Test	001 T	mg/L	MERCURY, Total	0.0002 mg/L	<0.0002

Testing Laboratory: Phoenix Environmental Signature: [signature] Date: 4-26-2016

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex* — TGA3D

AQUATIC TOXICITY: *Pimephales promelas* — TGA6C

03/31/2006 16:00 FAX 2037238539 VEOLIA WATER 009

CHAIN OF CUSTODY RECORD

Coolant: IPK ☐ ICE ☐ No ☐

Temp °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 #:
☐ Email:

Customer: AES
Address:

Project:
Report to: Dan L
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	Filtered	Soil VOA Vials ( ) Unpreserved ( ) H2O	8oz Soil containers ( )	40 ml VOA Vial ( ) As is ( ) HCl	1oz	GL Amber 1000ml ( ) As is ( ) HCl	500ml	PL 1oz ( ) As is ( ) H2SO4	250ml	PL H2SO4	250ml	PL HNO3	250ml	PL NaOH	250ml	Bacteria (ES 19)	Bacteria (with 19)
C36-1746	BH 0516-3	WW	4-7-16	11:10	X																
	Ct. Water																				
	Northern Equine																				
	3012 Hunt	Backwash																			
C36-1747	BH 0535	WW	4-7-16	—	X																
	Veolia	Dayshack																			

Relinquished by: _____ Accepted by: _____

Date: 4-8-16 Time: 0730
Date: 4-8-16 Time: 0935

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 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: CT

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

Cooler: Yes ☐ No ☐
Coolant: IPK ☐ ICE ☐ No ☐

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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

Temp °C Pg of

Data Delivery:
☐ Fax #:
☒ Email: tom.deller@veolia.com

Customer: Veolia Water, NA
Address: 500 Cherry St Ext
Naugatuck, Ct 06770
Attn: Tom Deller

Project: Naugatuck
Report to: Tom Deller
Invoice to: 2nd Qtr 2016 ATMR
Phone #: 203-723-1433 ext 2004
Fax #: 203-723-8539

Project P.O: 2nd Qtr 2016 ATMR

This section MUST be completed with Bottle Quantities.

Sampler's Signature: T-Deller Date: 4-7-16

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

PHOENIX USE ONLY SAMPLE #	Client Sample - Information - Identification: Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request: Aquatic Toxicity	Aluminum, Antimony, Arsenic, Beryllium	BOD5, CBOD5, Cadmium, Hex Chromium	Chromium, Total CL2 Residual	Copper, Cyanide, Amenable	Cyanide, Total	Iron, Lead, Mercury, Nickel, NH3, NO2	NO3, Phenols, Total Phosphorus	Selenium, Silver, TSS, Thallium	Zinc, NOAEL Static 48hr Acute D Pulex	NOAEL Static 48hr Acute Pimephales	Cube	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [X] H2SO4	PL As is [ ] 250ml [X] 500ml [X] 1000ml	PL H2SO4 [X] 250ml [X] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
	Effluent	WW	4/6/2016	24hr	X	X	X	X	X	X	X	X	X	X	X		X			X	X	X	X	X		

Relinquished by: T-Deller Accepted by: Date: 2016/4/7 Time: 12:00

Comments, Special Requirements or Regulations:

2nd Qtr 2016 ATMR

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ 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: CT

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

Cooler: Yes ☑ No ☐
Coolant: IPK ☐ ICE ☑ No ☐
Temp 6 °C Pg of

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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 #:
☑ Email: tom.deller@veolia.com

Customer: Veolia Water, NA
Address: 500 Cherry St Ext
Naugatuck, Ct 06770
Attn: Tom Deller

Project: Naugatuck
Report to: Tom Deller
Invoice to: 2nd Qtr 2016 ATMR
Phone #: 203-723-1433 ext 2004
Fax #: 203-723-8539

Project P.O: 2nd Qtr 2016 ATMR

This section MUST be completed with Bottle Quantities.

Sampler's Signature: T. Deller Date: 4-7-16

Client Sample - Information - Identification

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	Aquatic Toxicity	Aluminum, Antimony, Arsenic, Beryllium	BOD5, CBOD5, Cadmium, Hex Chromium	Chromium, Total CL2 Residual	Copper, Cyanide, Amenable	Cyanide, Total	Iron, Lead, Mercury, Nickel, NH3, NO2	NO3, Phenols, Total Phosphorus	Selenium, Silver, TSS, Thallium	Zinc, NOAEL Static 48hr Acute D Pulex	NOAEL Static 48hr Acute Pimephales	Cube	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ]	PL As is [ ] 250ml [X] 500ml [X] H2SO4	PL H2SO4 [X] 250ml [X] 1000ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
08825	Effluent	WW	4/6/2016	24hr	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X	X	X

Relinquished by: T. Deller 4-7-16 12:00
Accepted by: 4-7-16 13:40

Comments, Special Requirements or Regulations:

2nd Qtr 2016 ATMR

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ 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: CT

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

VEOLIA
WATER

Sent via certified mail on April 29, 2016: Receipt # 7014 1200 0002 2236 9999

April 29, 2016

Connecticut Department of Energy and Environmental Protection
Bureau of Air Management
Compliance Analysis & Coordination Unit
79 Elm Street, 5th Floor
Hartford, CT 06106-5127

Subject: First Quarter 2016 COMS Summary Report

Dear Sir/Madam:

Enclosed please find a copy of the *Continuous Opacity Monitoring Summary Report* for the first quarter of 2016. Please note the incinerator did not operate the full period as a result of major mechanical repairs. The incinerator was shutdown Jan. 26, 2016, restarted on February 9 then shutdown again on Feb 11, 2016.

In addition, even though the mechanical repairs are complete, the incinerator was not restarted as the March 21, 2016 MACT upgrades were not installed as well as a lack of EPA approval to operate. The Borough of Naugatuck is working with their consultant and EPA to determine the conditions that will allow the incinerator to resume operations. The incinerator will remain out of service until the necessary approvals to restart are in place.

Please contact me if you have any questions regarding the enclosed reports.

Sincerely,

Veolia Water North America-Northeast, LLC

John Batorski
Project Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck.
(enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Air Management
Compliance Analysis & Coordination Unit
79 Elm Street
Hartford, Connecticut 06106-5127

Client #:
Sequence #:
Town #:
Premises #:
CADIS Tracking #:

Continuous Opacity Monitoring System Summary Report

Part 1 FACILITY INFORMATION

Corporation Name	Borough of Naugatuck		
Premises Name	Borough of Naugatuck POTW		
Corporation Address	229 Church Street, Naugatuck, CT 06770		
Premises Address	500 Cherry Street, Naugatuck, CT 06770		
Premises Contact Person	John Batorski		
Contact Phone/FAX/e-mail	(203) 723-1433	(203) 723-8539	
Reporting Period Dates	From: January 1, 2016	To: March 31, 2016	
Were there any monitoring system failures during this reporting period? (Yes/ No - provide details in report).	YES	Attachments: COMS data (CD or diskette); COMS data (e-mailed); ☐ Copy of quarterly QA audits; ☐ Excepted activities records (if requested).	
Are any excess emissions being reported during this reporting period? (Yes/No - provide details in report).	NO		

Part 2 CERTIFICATION

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

Preparer : CK Environmental

Date: April 29, 2016

Plant Signature: John Batorski

Print (or type) John Batorski

Name and Title: Plant Manager

PART 3 PERFORMANCE REPORT			
Facility Name:	Borough of Naugatuck POTW		
Combustion Unit(s) Descriptions	Fluidized Bed Incinerator		
UNIT AND MONITOR INFORMATION			
Unit Number or ID	EMU 52		
Unit Operating Hours	1371.70 hours		
Sampling Location	Fluidized Bed Incinerator Emissions Stack		
Manufacturer / Model No.	Land / 4500 Mark III	Serial No.	214324.52
Date of Certification	September 11, 2015	Date of last QA audit	March 25, 2016
MONITOR DATA AVAILABILITY			
Monitoring equipment malfunctions	.22 hours		
Non-monitoring equipment malfunctions	.23 hours		
Calibrations	5.17 hours		
Other known causes[1]			
Unknown causes			
Total COM downtime	5.62 hours		
Data Availability (calculated)	99.6%		

$$\%\ \text{Data Availability} = \left(\frac{\text{Unit Operating Time} - \text{Monitoring Downtime}}{\text{Unit Operating Time}} \right) * 100$$

where:
Unit operating time = total hours of source operation at any level during the calendar quarter; and
Monitoring downtime = total hours of source operation at any level during the calendar quarter where either no CEM equipment data was collected or the CEM equipment data was invalid. Such periods include, but are not limited to, quality assurance activities such as calibration, preventative maintenance, and calibration drift exceedances or quality assurance audits that result in invalid data. [R.C.S.A. 22a-174-4(c)(5)]

1 - other known causes includes all quality assurance activities other than calibrations (e.g., preventative maintenance, quarterly audits) and out-of-controls periods.

PART 4, SECTION 4 COMS EMISSION SUMMARY REPORT

Facility Name:	Borough of Naugatuck POTW

UNIT INFORMATION

Unit Number or ID	EMU 52	Unit Operating Hours (a)	1371.70

QUESTION 1 Did the period of exception from the visible emissions standards of 22a-174-18(b)(2) exceed 0.5% of the total operating hours during the calendar quarter?	☐ Yes xNo
QUESTION 2 Were there any visible emissions in excess of 60% opacity (six-minute block average) during the calendar quarter?	☐ Yes xNo
QUESTION 3 Were there any periods of visible emissions in excess of the visible emission standards of 22a-174-18(b)(2) not listed in the excepted activities in 22a-174-18(j)?	☐ Yes xNo

OPACITY EXCESS EMISSIONS SUMMARY

Emission Limit / Averaging Period	(1) 20% / six-minute average	(2) 40% / one-minute average
Startup / Shutdown		
Malfunction: Control Equipment		
Malfunction: Operational / Process		
Commissioner-approved stack testing		
Intentional soot blowing		
Fuel Switching		
Sudden load change		
Other known causes		
Unknown causes		
Total duration of excess emissions		

Total unit operating minutes during the operating period. (a)	Total duration of excess emissions in minutes for both limits combined. (b) = ∑(1) + ∑(2)	Total number of overlapped minutes for both limits. (c)	Adjusted total of excess emissions in minutes for both limits combined. (d) = (b) - (c)	Total duration of excess emissions as a percentage of operating time. (e) = (100*d)/(a)
124800	0	0	0	0

Opacity Monitoring Reports

COMPANY:	VEOLIA WATER NORTH AMERICA
LOCATION:	Naugatuck, CT
SOURCE:	18 Incinerator
CEMS ID:	1218567
DATE CREATED:	03/31/2016 @ 15:18
PERIOD:	01/01/2016 - 03/31/2016

EXCEEDENCES (VALID OPACITY (%)

DATE	START HOUR	END HOUR	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
01/01/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/02/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/03/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/04/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/05/2016	03:00	12:51	285	13	PROCESS DOWN	N/A
01/05/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/06/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/07/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/07/2016	09:12	09:13	2	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
01/08/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/09/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/10/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/11/2016	03:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/11/2016	11:02	11:02	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
01/11/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/11/2016	09:18	11:55	155	13	PROCESS DOWN	N/A
01/12/2016	04:51	04:51	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
01/12/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/13/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/14/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/15/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/16/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/17/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/18/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/19/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/20/2016	09:20	10:31	71	13	PROCESS DOWN	N/A
01/21/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/22/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/23/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/24/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/25/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/26/2016	03:37	13:13	157	13	PROCESS DOWN	N/A
01/26/2016	18:44	18:58	45	13	PROCESS DOWN	N/A
01/27/2016	05:13	05:51	38	13	PROCESS DOWN	N/A
01/27/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/28/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
01/29/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
01/29/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/30/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
01/31/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
01/31/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/01/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/02/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/02/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/03/2016	03:00	05:55	355	13	PROCESS DOWN	N/A
02/03/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/03/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/04/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/04/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/05/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/06/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/06/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/07/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/08/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/08/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/09/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/10/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/10/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/11/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/12/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/12/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/13/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/14/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/14/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/15/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/16/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/16/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/17/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/18/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/18/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/19/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/20/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/20/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/21/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/22/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/22/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/23/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/24/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/24/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/25/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/26/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/26/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/27/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
02/28/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
02/28/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
02/29/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/01/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/01/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/02/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/03/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/03/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/04/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/05/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/05/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/06/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/07/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/07/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/08/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/09/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/09/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/10/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/11/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/11/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/12/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/13/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/13/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/14/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/15/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/15/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/16/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/17/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/17/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/18/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/19/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/19/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/20/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/21/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/21/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/22/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/23/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/23/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/24/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/25/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/25/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/26/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/27/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/27/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/28/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/29/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/29/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
03/30/2016	06:00	23:59	1079	13	PROCESS DOWN	N/A
03/31/2016	00:00	05:54	355	13	PROCESS DOWN	N/A
03/31/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE

01/22/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/19/2016	00:00	05:55	355	33	PROCESS DOWN	N/A
01/14/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/14/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/25/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/15/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/15/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/15/2016	00:00	11:51	711	33	PROCESS DOWN	N/A
01/15/2016	11:52	23:59	487	33	PROCESS DOWN	N/A
01/14/2016	00:00	05:55	355	33	PROCESS DOWN	N/A
01/14/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/14/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/13/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/13/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/12/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/12/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/12/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/11/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/11/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/11/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/10/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/10/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/10/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/09/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/09/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/09/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/08/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/08/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/08/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/07/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/07/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/07/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/06/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/06/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/06/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/05/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/05/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/05/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/04/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/04/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/04/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/03/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/03/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/03/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/02/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/02/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/02/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/01/2016	06:00	23:59	1080	33	PROCESS DOWN	N/A
01/01/2016	00:00	05:54	355	33	PROCESS DOWN	N/A
01/01/2016	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
01/31/2016	09:35	09:43	9	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/25/2016	NO	INCIDENT	OCCURRED			
01/24/2016	NO	INCIDENT	OCCURRED			
01/23/2016	NO	INCIDENT	OCCURRED			
01/22/2016	NO	INCIDENT	OCCURRED			
01/21/2016	NO	INCIDENT	OCCURRED			
01/20/2016	NO	INCIDENT	OCCURRED			
01/19/2016	NO	INCIDENT	OCCURRED			
01/18/2016	NO	INCIDENT	OCCURRED			
01/17/2016	NO	INCIDENT	OCCURRED			
01/16/2016	NO	INCIDENT	OCCURRED			
01/15/2016	NO	INCIDENT	OCCURRED			
01/14/2016	NO	INCIDENT	OCCURRED			
01/13/2016	NO	INCIDENT	OCCURRED			
01/12/2016	NO	INCIDENT	OCCURRED			
01/11/2016	NO	INCIDENT	OCCURRED			
01/10/2016	NO	INCIDENT	OCCURRED			
01/09/2016	NO	INCIDENT	OCCURRED			
01/08/2016	NO	INCIDENT	OCCURRED			
01/07/2016	NO	INCIDENT	OCCURRED			
01/06/2016	NO	INCIDENT	OCCURRED			
01/05/2016	NO	INCIDENT	OCCURRED			
01/04/2016	NO	INCIDENT	OCCURRED			
01/03/2016	NO	INCIDENT	OCCURRED			
01/02/2016	NO	INCIDENT	OCCURRED			
01/01/2016	NO	INCIDENT	OCCURRED			
01/26/2016	05:50	23:59	1090	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/27/2016	00:00	23:59	1440	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/28/2016	00:00	23:59	1440	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/29/2016	00:00	23:59	1440	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/30/2016	00:00	23:59	1439	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
01/31/2016	00:00	23:59	1439	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA

INCIDENT SUMMARY (HOURS OF DELAY (H))

CODE	HOURS	PERCENT	EXPLANATION
33	812.5	84.63	PROCESS DOWN
18	0.32	0.01	PRIMARY MONITOR MALFUNCTION
18	144.28	14.99	DATA HANDLING SYSTEM MALFUNCTION
20	5.37	0.54	CORRECTIVE MAINTENANCE

TOTAL HOURS: 961.92

process down = 144 hrs
CEMS turned off to stable

91 days in Q1, 2016 = 2184 hrs
- 812.30
1371.70 hrs

1371.7 - 5.62 / 1371.90 X100 = 99.69%

VEOLIA
WATER

Sent via certified mail on April 28, 2016: Receipt # 7014 1200 0002 2237 0001

April 28, 2016

Connecticut Department of Energy and Environmental Protection
Mr. John Degirolamo
Bureau of Air Management
Compliance Analysis & Coordination Unit
79 Elm Street, 5th Floor
Hartford, CT 06106-5127

Subject: First Quarter 2016 CEM Cylinder Gas & Opacity Report

Dear Mr. Degirolamo:

Enclosed please find enclosed a copy of the *Cylinder Gas/Opacity Audits* for the first quarter of 2016. All data is within acceptable ranges.

Please contact me if you have any questions regarding the enclosed reports.

Sincerely,

Veolia Water North America-Northeast, LLC

John Batorski
Project Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck.
(enclosure)

Veolia Water NA -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
Tel 203-723-1433 / 203-723-8539
www.veoliawaterna.com

Test Report – CEMS Cylinder Gas & Opacity Audit First Quarter 2016

CEMS/COMS Monitoring the Fluidized Bed Incinerator
Borough of Naugatuck
Naugatuck, CT

PREPARED FOR:	Veolia Water 500 Cherry Street Naugatuck, Connecticut 06770
CONCERNING:	Cylinder Gas Audit (CGA) and Opacity Audit Fluidized Bed Incinerator 500 Cherry Street Naugatuck, Connecticut 06770
PREPARED BY:	CK Environmental, Inc. 1020 Turnpike Street, Suite # 8 Canton, MA 02021
	CK Project No. 4931
	April 27, 2016

CK Environmental, Inc.
1020 Turnpike St., Suite 8
Canton, MA 02021 USA
Toll-free: 888-CKE-0303
International: 781-828-5200
Fax: 781-828-5380
www.ckenvironmental.com

CK Environmental

REPORT REVIEW CERTIFICATION

I, the undersigned, hereby certify that I have personally reviewed this report and to the best of my knowledge all information and calculations contained herein are true, accurate, and complete. CK has accreditation by the Stack Testing Accreditation Council (STAC) and operates in conformance with the ASTM D7036-04 requirements.

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Heidi Fisher, Project Coordinator

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Ale Kuncaitis, Project Engineer

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TEST SUMMARY

Facility Name:	**Veolia Water North America – Northeast, LLC** 500 Cherry Street Naugatuck, Connecticut
Facility Contact:	**Veolia Water NA – Northeast, LLC** John Batorski / Plant Manager Tel. No. 203-723-1433 Email: john.batorski@veoliawaterna.com
Regulatory Agency: Contact:	**State of Connecticut** **Department of Energy and Environmental Protection** John Degirolamo / Air Pollution Control Engineer Tel. No. 203-424-3562
Testing Organization:	**CK Environmental, Inc.** 1020 Turnpike Street, Suite 8 Canton, Massachusetts 02021
Project Manager:	Mr. Michael Unterweger / Project Manager Tel. No. 781-828-5200 Email: munterweger@cke.us
Test Personnel:	Mr. Robert Ciriello / Project Technician
Unit Tested:	Sludge Incinerator Exhaust Stack
Test Date:	March 25, 2016

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1.0 INTRODUCTION

1.1 Summary of Test Program

CK Environmental, Inc. (CK) was contracted by Veolia Water North America to conduct a cylinder gas audit (CGA) and an opacity audit on the Continuous Emissions Monitoring System (CEMS) which monitors the emissions at the Fluidized Bed Incinerator located in Naugatuck, Connecticut. The CEMS/COMS monitor the emissions of oxygen, carbon monoxide and opacity from the incinerator operated at this facility. Auditing of the CEMS/COMS was conducted on March 25, 2016.

The purpose of this test program was to demonstrate that the accuracy of the CEMS/COMS operated at this facility and to ensure that it met the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0. The opacity audit was performed to satisfy the requirements of Performance Specification 1, Section 7.0.

A brief description of the facility is contained in Section 2.0. Section 3.0 of this test report summarizes the results of this testing program. Section 4.0 describes the test methods and procedures used. The CK quality assurance procedures are detailed in Section 5.0. Test field data sheets have been included in Appendix A. Facility CEMS and process data printouts are presented in Appendix B. All relevant calibration documentation has been provided in Appendix C.

1.2 Key Personnel

The test program was coordinated by John Batorski. Mr. Michael Unterweger of CK is the project manager for this effort. Robert Ciriello was responsible for all on-site audit activities. Contact information for key personnel can be found in Table 1-1 below.

Table 1-1
Key Personnel

Contact	Company	Telephone No.
John Batorski	Veolia Water	203-723-1433
Michael Unterweger	CK Environmental, Inc.	781-828-5200

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2.0 PLANT AND SAMPLING SYSTEM DESCRIPTION

2.1 Process Description and Operation

Veolia Water North America Northeast, LLC operates the Borough of Naugatuck POTW which incinerates approximately 51 dry tons of municipal sludge per day and processes nonhazardous industrial waste water. A fluidized bed incinerator (FBI) is used to incinerate sludge. The POTW also houses settling tanks, aeration tanks, thickening tanks, holding tanks, and sludge belt filter presses.

The Zimpro fluidized bed incinerator has a sludge design feed rate of 3.5 DT/hr. Sludge is fed to the bottom of the sand bed where air is injected at high pressure under the bed, fluidizing the sand and the sludge. Processing of sludge within the sand bed consists of evaporation of water and pyrolysis of organic material. The remaining carbon and combustible gases are burned in the freeboard area above the sand bed. Oil lances are located within the sand bed in order to deliver auxiliary fuel to maintain the desired combustion temperature if necessary. All ash generated in the combustion chamber leaves the top of the incinerator.

After the flue gas passes through the waste heat recovery unit, particulate is removed by a combined venturi and impingement tray scrubber system, and wet electrostatic precipitators (WESP). The venturi section consists of a narrow, adjustable throat, which increases gas velocity, turbulence and contact with added water, in order to collect ash particles and acid gases. The impingement tray scrubber provides cool plant effluent, which removes additional particulate and acid gases. There are two identical WESPs located in parallel of which only one operates at any given time.

2.2 Continuous Emission Monitoring System

The continuous emissions/continuous opacity monitoring system is designed to meet the requirements of 40 CFR, §60.13, §60.150 and 40 CFR, Part 503, Subpart E, §503.40., and 40 CFR, Part 60, Appendix B, PS 1. The extractive CEMS transport sample gas from the stack mounted sample probe via heated lines and sample conditioning system to the analyzers for continuous monitoring of gaseous pollutants. Effluent concentrations of carbon monoxide (CO) and oxygen (O2) are measured by the CEM system. In addition, the system monitors opacity at the outlet stack of the FBI.

The CEM sampling system is full dry extractive design. The system extracts a sample from the gas stream through a primary filter located at the sample probe, and transports it from the sampling location to the CEMS analysis enclosure in a heated sample line. The sample lines and filter are maintained at 250 °F to prevent the sample from condensing during transportation to the sample conditioning system. The heated line terminates at a thermo-electric condenser where moisture is removed from the sample gas stream. Dry sample gas exiting the condenser passes through a second particulate filter, the single head heated sample pump, and a backpressure regulator prior to distribution to the analyzers via separate flow controlling rotometers. The sample probe located on the exhaust stack is of sufficient length to reach the center sampling point of the stack.

The moisture removal systems continuously remove moisture from the sample gas while maintaining minimal contact between the condensate and the sample gas. The M&C Tech Group Model ECS thermoelectric gas sample chiller contains two (2) glass heat exchangers that are continuously drained of condensate by a dual head peristaltic pump. Temperature of the chiller is regulated and set to maintain a temperature of 40 °F.

A single head - heated, diaphragm pump is used to transport the gas sample through the system to the analyzers. This pump is manufactured by Air Dimensions and all parts coming into contact with the sample gas stream are Teflon, Kynar or stainless steel.

The COM system monitors the opacity emissions present in the exit gas of the FBI stack. The COMS utilizes a Land Combustion, Model 4500 Mark III, opacity monitor. This monitor is a microprocessor based system and operates in a dual pass mode in the visible light spectrum. Data collection and daily calibration error checks are performed by the data acquisition handling system (DAHS).

Table 2-1
CEMS Specifications

Parameter	Manufacturer	Model	Serial No.	Range
O2, Dry	Siemens	Oxymat 6E	7MB20211 EAOOOAA 1	0-25%
CO	Thermo Environmental	48i	1405660903	0-300 ppmvd
Opacity	Land	4500 Mark III	~~0095478~~ 2143245 2 corrected serial number (NV)	0-100%

A Contec Data Acquisition Handling System (DAHS) uses an Allen Bradley programmable logic controller (PLC), an Ethernet data highway, a Dell computer, and Windows XP operating system. The system is designed to meet 40 CFR §60.13, 40 CFR 60, Subpart 0, section §60.155, 40 CFR, Part 503, Subpart E, sections §503.41 (f), (h) and CTDEP requirements as provided in the Facilities Title V permit.

The Allen Bradley SLC 505 PLC is the foundation of the data collection, data averaging, alarm, and warning functions. These functions are performed in standard ladder logic. Additionally, the PLC is responsible for daily calibration error checking, short-term data storage, and communications over an Ethernet module to the DAHS computer.

The Contec Data Acquisition Handling System software is configured to display pollutants in units of concentration and in units of emissions. The DAHS also collect process data for Subpart "0" reporting requirements. Data is provided on the display screens as 1 minute averages, 6 min averages (opacity only), 1-hour averages, and 24-hour averages. The system performs standard reporting functions including minute, hourly, daily, and monthly reports, daily calibration and system downtime summaries, and source and analyzer downtime reports. Additionally, the Contec software provides the CEMS data in a graphics mode as trend panels, bar graphs, and strip chart displays. The graphic displays show the CEMS data as real-time or as historical trends. The system also displays and record process data as 1-minute, 1-hour, and 24-hour averages.

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3.0 SUMMARY OF RESULTS

3.1 Objectives

The purpose of this test program was to demonstrate that the accuracy of the CEMS/COMS operated at this facility and to ensure that it met the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0. The opacity audit was performed to satisfy the quarterly Performance Specification 1, Section 7.0. The testing satisfies the requirements set forth in the facility's Title V permit (Permit No 109-0059-TV).

3.2 Field Test Changes

All testing was conducted in accordance with the current regulations listed in Section 3.1 of this report. No field changes were necessary for this test program.

3.3 Presentation of Results

A CGA was conducted on the outlet CEMS installed on the incinerator operated at this facility to document the CEMS RA for the fourth quarter 2015. The CEMS oxygen and carbon monoxide CGA and opacity audit were conducted on November 20, 2015.

The CGA was conducted in accordance with the test procedures and acceptance criteria of 40 CFR 60, Appendix B. All pollutant and diluent gas monitors were each challenged three times with two different calibration standards, a low-audit point and a mid-audit point. The concentrations of audit gases conformed to range specifications defined in 40 CFR 60, Appendix A. The responses of the monitors to the gas standards were recorded by the facility data acquisition and handling system (DAHS) as one-minute averages. The RA of each monitor was determined for each standard as the difference between the average response to the standard, and as a percentage of the standard concentration. The protocol calibration gases were directed into the same location that the gases are sent into for the daily calibrations.

The opacity audit was performed by alternately passing three filters of differing optical density (≈ 10%, 20% and 30%) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

Table 3-1 summarizes the test results for each of the parameters of the CEMS. All monitors were able to demonstrate compliance with the acceptance criteria of 40 CFR Part 60, Appendix B of less than or equal to 15 percent of each audit gas standard concentration during the CGA. Table 3-2 summarizes the COMS test results with criteria found in Performance Specification 1 with the opacity monitor reading with less than 3% difference from the corrected filter value.

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4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 Cylinder Gas Audit Procedure

The CGAs were conducted in accordance with the test procedures and acceptance criteria of 40 CFR 60, Appendix F. All pollutant and diluent gas monitors were each challenged three times with two different calibration standards, a low audit point and a mid-audit point. The responses of the monitors to the gas standards were recorded by the facility data acquisition and handling system (DAHS). The RA of each monitor was determined for each standard as the difference between the average response to the standard and the standard concentration as an absolute difference, and as a percentage of the standard concentration.

4.2 Opacity Audit Procedure

The opacity audit was performed by alternately passing three filters of different known opacity values (9.74, 19.96, and 31.97) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

5.0 CK's QUALITY ASSURANCE PROCEDURES

CK's emission test teams are committed to providing high quality source emissions measurement services. To meet this commitment, CK follows appropriate US EPA sampling procedures and implements appropriate quality assurance/quality control (QA/QC) procedures with all test programs. These procedures ensure that all sampling is performed by competent, trained individuals and that all equipment used is operational and properly calibrated before and after use. Records of all CK equipment calibrations are maintained in CK's files.

The CK quality assurance program generally follows the guidelines of the US EPA *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III - Stationary Source-Specific Methods* (EPA/600/R-94/038c - September 1994) as well as CK's in house Quality Manual.

5.1 Sampling

Compressed gases used as audit standards are always US EPA Traceability Protocol certified calibration gas standards, certified in accordance with Procedure No. G1 with an analytical accuracy of +/- 1 percent. The Certificates of Analysis for the gas standards used during the performance of the CGA were available on site and are presented in Appendix C.

All opacity filters are calibrated and certified by Environmental Monitor Service, Inc. Each filter is assigned a serial number and calibrated on an annual basis. All calibration certificates can be found in Appendix C.

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5.2 Reporting

All reports undergo a tiered review. The first review of the report and calculations are made by the report's author. A second review is then performed by another Project Engineer/Scientist. The review process is verified by the signed Report Review Certification which has been included as part of this test report.

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TABLES

Table 3.1 Summary of Results
Cylinder Gas Audit
FB Incinerator
Veolia Water NA - Naugatuck, CT
Naugatuck, Connecticut
1st Qtr - 2016

CEMS	Test Date	Monitor	Span / Units	Cylinder Gas Audit				
				Standard Conc.	Average Response	Error (% of std.conc.)	Error (abs. diff.)	CGA Criteria
Oxygen	03/25/16	Siemans	0-25%	5.01	5.03	0.47	0.02	15.0% or 0.5% O_2
				10.00	10.10	1.00	0.10	15.0% or 0.5% O_2
Carbon Monoxide	03/25/16	TECO	0-300 ppm	75.00	75.97	1.29	0.97	15.0% or 5 ppm
				167.80	165.92	1.12	1.88	15.0% or 5 ppm

Table 3.2 Summary of Results

OPACITY AUDIT CALCULATION SHEET

CLIENT: Veolia Water NA - Naugatuck, CT
SOURCE: FB Incinerator

DATE: 3/25/16
AUDITOR: Robert Ciriello

Run #	Zero	Low	Mid	High
Pre Zero				
1	0.10	9.40	19.90	32.80
2	0.10	9.60	20.20	32.80
3	0.20	9.60	20.20	32.80
4	0.20	9.60	20.20	32.80
5	0.20	9.60	20.20	32.80
6 Min Avg	0.20	9.60	20.20	32.80
Post Zero				

	Actual Filter Values		Corrected Filter Values (2)
PATH LENGTH CORRECTION FACTOR (PLCF) =	1.000	-	N/A
LOW CALIBRATION FILTER VALUE =	9.74	-	9.74
MID CALIBRATION FILTER VALUE =	19.96	-	19.96
HIGH CALIBRATION FILTER VALUE =	31.97	-	31.97

N	Low	Value	Delta L	Del L^2
1	**9.4**	**9.7**	**0.4**	**0.1**
2	**9.6**	**9.7**	**-0.1**	**0.0**
3	**9.6**	**9.7**	**-0.1**	**0.0**
4	**9.6**	**9.7**	**-0.1**	**0.0**
5	**9.6**	**9.7**	**-0.1**	**0.0**
Sum =			-0.2	0.2
A = Sum (Delta L) ^ 2 =			0.0	
B = Sum (Delta L ^ 2) =			0.2	
N =			5.0	
(N * B) - A =			1.1	

Mean Error (ME) = (Sum Delta L / N)

ME = **0.0**

Confidence Interval (CI) = SQRT((N*B)-A)*0.2776

CI = **0.3**

Calibration Error = ABS (ME) + CI

Calibration Error (1) = **0.3**

6 Minute Average Mean Error = **0.1**

N	Mid	Value	Delta L	Del L^2
1	**19.9**	**20.0**	**-0.1**	**0.0**
2	**20.2**	**20.0**	**0.2**	**0.1**
3	**20.2**	**20.0**	**0.2**	**0.1**
4	**20.2**	**20.0**	**0.2**	**0.1**
5	**20.2**	**20.0**	**0.2**	**0.1**
Sum =			0.9	0.2
A = Sum (Delta L) ^ 2 =			0.8	
B = Sum (Delta L ^ 2) =			0.2	
N =			5.0	
(N * B) - A =			0.4	

Mean Error (ME) = (Sum Delta L / N)

ME = **0.2**

Confidence Interval (CI) = SQRT((N*B)-A)*0.2776

CI = **0.2**

Calibration Error = ABS (ME) + CI

Calibration Error (1) = **0.3**

6 Minute Average Mean Error = **0.2**

N	High	Value	Delta L	Del L^2
1	**32.8**	**32.0**	**0.8**	**0.7**
2	**32.8**	**32.0**	**0.8**	**0.7**
3	**32.8**	**32.0**	**0.8**	**0.7**
4	**32.8**	**32.0**	**0.8**	**0.7**
5	**32.8**	**32.0**	**0.8**	**0.7**
Sum =			4.1	3.4
A = Sum (Delta L) ^ 2 =			17.2	
B = Sum (Delta L ^ 2) =			3.4	
N =			5.0	
(N * B) - A =			0.0	

Mean Error (ME) = (Sum Delta L / N)

ME = **0.8**

Confidence Interval(CI)=SQRT((N*B)-A)*0.2776

CI = **0.0**

Calibration Error = ABS (ME) + CI

Calibration Error (1) = **0.8**

6 Minute Average Mean Error = **0.8**

(1) - Calculated per 40 CFR 60 Appendix F Procedure 3 (CE ≤ 3.0)
(2) - Corrected Filter Value = 1-(1-Actual Filter Value)^{PLCF} where the actual filter value = (Labeled % opacity / 100)

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APPENDIX A

FIELD DATA & CALCULATION SHEETS

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CYLINDER GAS AUDIT (CGA) DATA SHEET

Client:	Veolia Water NA - Naugatuck, CT	Test Area:	FB Incinerator
Instrument:	Siemens	Diluent:	O2
Model:	Oxymat 6E	Range:	0 - 25 %
Serial #:	7MB20211-EA000AA 1	Auditor:	RTC
Date:	March 25, 2016	Quarter:	1st Qtr - 2016

LOW-RANGE AUDIT (20 - 30% of Pollutant Range or between 4 - 6% for O2/CO2)

	Audit Response 1	Audit Response 2	Audit Response 3	Average Response	Cylinder Concentration	PGVP ID# = **N22014**
						Gas Code = **N/A**
RESPONSE	5.1	5.0	5.0	5.0	5.01	Cylinder # = **EB0054499**
TIME	10:45	10:51	10:58	**ACCURACY =**		Exp. Date = **2/4/2022**

MID-RANGE AUDIT (50 - 60% of Pollutant Range or between 10 - 12% for O2/CO2)

	Audit Response 1	Audit Response 2	Audit Response 3	Average Response	Cylinder Concentration	PGVP ID# = **N22014**
						Gas Code = **N/A**
RESPONSE	10.1	10.1	10.1	10.1	10.00	Cylinder # = **EB0054497**
TIME	10:48	10:55	11:03	**ACCURACY =**		Exp. Date = **2/4/2022**

ACCURACY CALCULATION

ACCURACY = ((Cm - Ca) / Ca) * 100
where: Cm = Analyzer Average Response
Ca = Calibration Gas Cylinder Concentration

ERROR MUST NOT EXCEED ±15% or ±5 ppm absolute (pollutant)

Quality Control Check: Completeness_____ Legibility_____ Accuracy_____ Specifications_____ Reasonableness_____

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CYLINDER GAS AUDIT (CGA) DATA SHEET

Client:	Veolia Water NA - Naugatuck, CT	Test Area:	FB Incinerator
Instrument:	TECO	Pollutant:	CO
Model:	48i	Range:	0 - 300 PPM
Serial:		Auditor:	RTC
Date:	March 25, 2016	Quarter:	1st Qtr - 2016

LOW-RANGE AUDIT (20 - 30% of Pollutant Range or between 4 - 6% for O2/CO2)

	Audit Response 1	Audit Response 2	Audit Response 3	Average Response	Cylinder Concentration	PGVP ID# = N22014
						Gas Code = N/A
RESPONSE	75.9	76.2	76.0		75.00	Cylinder # = EB0054499
TIME	10:45	10:51	10:58	ACCURACY =		Exp. Date = 2/4/2022

MID-RANGE AUDIT (50 - 60% of Pollutant Range or between 10 - 12% for O2/CO2)

	Audit Response 1	Audit Response 2	Audit Response 3	Average Response	Cylinder Concentration	PGVP ID# = N22014
						Gas Code = N/A
RESPONSE	165.9	166.0	166.0	166.0	167.80	Cylinder # = EB0054497
TIME	10:48	10:55	11:03	ACCURACY =		Exp. Date = 2/4/2022

ACCURACY CALCULATION

ACCURACY = ((Cm - Ca) / Ca) * 100
where: Cm = Analyzer Average Response
Ca = Calibration Gas Cylinder Concentration

ERROR MUST NOT EXCEED ±15% or ±5 ppm absolute (pollutant)

Quality Control Check: Completeness_____ Legibility_____ Accuracy_____ Specifications_____ Reasonableness_____

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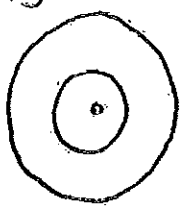
Client	Veolia Water NA - Naugatuck, CT
Unit	Fluidized Bed Incinerator
Date	3/25/2016

Run	Zero	Low	Mid	High
Time	11:39			
1	0.1	9.4	19.9	32.8
Time				
2	0.1	9.6	20.2	32.8
Time				
3	0.2	9.6	20.2	32.8
Time				
4	0.2	9.6	20.2	32.8
Time				12:40
5	0.2	9.6	20.2	32.8
6-min Avg	0.2	9.6	20.2	32.8

Alignment check



12:41 - 13:06

*Seconds to reach high filter value= ~3seconds

	Value
Path Length Correction Factor (PLCF)	1.000
Lo Cal Filter Value	9.74
Mid Cal Filter Value	19.96
HI Cal Filter Value	31.97

Corrected Filter Value = 1 - (1 - Actual Filter Value)^{PLCF}
where the actual filter value = (Labeled % opacity / 100)

Quality Control Check:

Completeness RTC Legibility RTC Accuracy RTC Specifications RTC Reasonableness RTC

CYLINDER GAS AUDIT DATA SHEET

Client:	Veolia Water NA - Naugatuck, CT	Test Area:	FB Incinerator
Instrument:	Siemans	Diluent:	Oxygen
Model:	Oxymat 6E	Range:	0-25%
Serial #:	7MB20211-EA000AA 1	Auditor:	Robert Ciriello
Date:	03/25/16	Quarter:	1st Qtr - 2016

LOW-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE
RESPONSE	5.1	5.0	5.0	5.0	5.01
TIME	10:45	10:51	10:58	**ACCURACY =**	**0.47**

PGVP ID# = N22014
Gas Code = N/A
Cylinder # = EB0054499
Exp. Date = 2/4/2022

MID-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE
RESPONSE	10.1	10.1	10.1	10.1	10.00
TIME	10:48	10:55	11:03	**ACCURACY =**	**1.00**

PGVP ID# = N22014
Gas Code = N/A
Cylinder # = EB0054497
Exp. Date = 2/4/2022

ACCURACY CALCULATION

ACCURACY = ((Cm - Ca) / Ca) * 100

where: Cm = Analyzer Response during audit (units of standard or concentration)
Ca = Average Audit Value (the calibration gas cylinder concentration)

CYLINDER GAS AUDIT DATA SHEET

Client:	Veolia Water NA - Naugatuck, CT	Test Area:	FB Incinerator
Instrument:	TECO	Pollutant:	Carbon Monoxide
Model:	48I	Range:	0-300 ppm
Serial #:	1405660903	Auditor:	Robert Ciriello
Date:	03/25/16	Quarter:	1st Qtr - 2016

LOW-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE
RESPONSE	75.8	76.1	76.1	76.0	75.00
TIME	10:45	10:51	10:58	**ACCURACY =**	**1.29**

PGVP ID# = N22014
Gas Code = N/A
Cylinder # = EB0054499
Exp. Date = 2/4/2022

MID-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE
RESPONSE	166.1	165.6	166.0	165.9	167.80
TIME	10:48	10:55	11:03	**ACCURACY =**	**1.12**

PGVP ID# = N22014
Gas Code = N/A
Cylinder # = EB0054497
Exp. Date = 2/4/2022

ACCURACY CALCULATION

ACCURACY = ((Cm - Ca) / Ca) * 100

where: Cm = Analyzer Response during audit (units of standard or concentration)
Ca = Average Audit Value (the calibration gas cylinder concentration)

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APPENDIX B

FACILITY CEMS DATA

AvgHrMn0325

ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACITY (%)
511	03-25-2016	08	30	0	0	0
512	03-25-2016	08	31	0	0	0
513	03-25-2016	08	32	0	0	0
514	03-25-2016	08	33	0	0	0
515	03-25-2016	08	34	0	0	0
516	03-25-2016	08	35	0	0	0
517	03-25-2016	08	36	0	0	0
518	03-25-2016	08	37	0	0	0
519	03-25-2016	08	38	0	0	0
520	03-25-2016	08	39	0	0	0
521	03-25-2016	08	40	0	0	0
522	03-25-2016	08	41	0	0	0
523	03-25-2016	08	42	0	0	0
524	03-25-2016	08	43	0	0	0
525	03-25-2016	08	44	0	0	0
526	03-25-2016	08	45	0	0	0
527	03-25-2016	08	46	0	0	0
528	03-25-2016	08	47	0	0	0
529	03-25-2016	08	48	0	0	0
530	03-25-2016	08	49	0	0	0
531	03-25-2016	08	50	0	0	0
532	03-25-2016	08	51	0	0	0
533	03-25-2016	08	52	0	0	0
534	03-25-2016	08	53	0	0	0
535	03-25-2016	08	54	0	0	0
536	03-25-2016	08	55	0	0	0
537	03-25-2016	08	56	0	0	0
538	03-25-2016	08	57	0	0	0
539	03-25-2016	08	58	0	0	0
540	03-25-2016	08	59	0	0	0
541	03-25-2016	09	0	0	0	0
542	03-25-2016	09	1	0	0	0
543	03-25-2016	09	2	0	0	0
544	03-25-2016	09	3	-6.2	1.8	0

Avg1Min0325

ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACity (%)
545	03-25-2016	09	4	-6.2	1.8	0
546	03-25-2016	09	5	-6.2	2	0
547	03-25-2016	09	6	-6.2	1.8	0
548	03-25-2016	09	7	-6.2	1.9	0
549	03-25-2016	09	8	-6.2	1.8	0
550	03-25-2016	09	9	-6.2	1.8	0
551	03-25-2016	09	10	-6.2	2	0
552	03-25-2016	09	11	-6.2	2.2	0
553	03-25-2016	09	12	-6.2	2	0
554	03-25-2016	09	13	-6.2	1.9	0
555	03-25-2016	09	14	-6.2	2.2	0
556	03-25-2016	09	15	-6.2	2.3	0
557	03-25-2016	09	16	-6.2	2.2	0
558	03-25-2016	09	17	-6.2	2.3	0
559	03-25-2016	09	18	-6.2	2.2	0
560	03-25-2016	09	19	0.1	2.2	0
561	03-25-2016	09	20	0.1	2.3	0
562	03-25-2016	09	21	0	2.3	0
563	03-25-2016	09	22	0.1	2.3	0
564	03-25-2016	09	23	0.1	2.3	0
565	03-25-2016	09	24	0	2.3	0
566	03-25-2016	09	25	15.5	2.3	0
567	03-25-2016	09	26	21.2	2.2	0
568	03-25-2016	09	27	-0.1	2.2	0
569	03-25-2016	09	28	-0.1	1.9	0
570	03-25-2016	09	29	0	1.9	0
571	03-25-2016	09	30	20.1	2.2	0
572	03-25-2016	09	31	20.1	1.9	0
573	03-25-2016	09	32	20.1	2	0
574	03-25-2016	09	33	0	137	0
575	03-25-2016	09	34	0	276.7	0
576	03-25-2016	09	35	0	277.2	0
577	03-25-2016	09	36	21.3	203.8	0
578	03-25-2016	09	37	21.4	2.7	0

Avg Min 0325

ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACITY (%)
579	03-25-2016	09	38	0	6.9	0
580	03-25-2016	09	39	0	2	0
581	03-25-2016	09	40	0	1.9	0
582	03-25-2016	09	41	0	0	0
583	03-25-2016	09	42	0	32.5	0
584	03-25-2016	09	43	0	274	0
585	03-25-2016	09	44	4.9	272	0
586	03-25-2016	09	45	21.4	10.3	0
587	03-25-2016	09	46	21.4	0.5	0
588	03-25-2016	09	47	21.4	0.4	0
589	03-25-2016	09	48	6.2	12.5	0
590	03-25-2016	09	49	5.1	75.7	0
591	03-25-2016	09	50	5	75.9	0
592	03-25-2016	09	51	5.1	75.8	0
593	03-25-2016	09	52	10.1	145.4	0
594	03-25-2016	09	53	10.1	166	0
595	03-25-2016	09	54	10.1	166.2	0
596	03-25-2016	09	55	5.1	99.4	0
597	03-25-2016	09	56	5	76.1	0
598	03-25-2016	09	57	5	76	0
599	03-25-2016	09	58	10.1	111.4	0
600	03-25-2016	09	59	10.1	165.8	0
601	03-25-2016	10	0	10.1	166	0
602	03-25-2016	10	1	10.1	166.1	0
603	03-25-2016	10	2	5	80	0
604	03-25-2016	10	3	5	76	0
605	03-25-2016	10	4	5	76.1	0
606	03-25-2016	10	5	10.1	131.5	0
607	03-25-2016	10	6	10.1	165.9	0
608	03-25-2016	10	7	10.1	166	0
609	03-25-2016	10	8	10.1	166	0
610	03-25-2016	10	9	10.4	166.2	0
611	03-25-2016	10	10	20.4	53.8	0
612	03-25-2016	10	11	21.3	0.8	0

Avg Mtr 0825

ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACITY (%)
613	03-25-2016	10	12	21.3	0.3	0
614	03-25-2016	10	13	21.3	0.4	0
615	03-25-2016	10	14	21.3	0.3	0
616	03-25-2016	10	15	21.3	0.3	0
617	03-25-2016	10	16	0	0.3	0
618	03-25-2016	10	17	-0.1	0	0
619	03-25-2016	10	18	-0.1	0	0
620	03-25-2016	10	19	20.1	0	0
621	03-25-2016	10	20	20.1	-0.2	0
622	03-25-2016	10	21	20.1	-0.2	0
623	03-25-2016	10	22	0	264	0
624	03-25-2016	10	23	-0.1	273.9	0
625	03-25-2016	10	24	-0.1	273.8	0
626	03-25-2016	10	25	21.3	36.7	0
627	03-25-2016	10	26	21.4	0.7	0
628	03-25-2016	10	27	21.3	0.4	0.03
629	03-25-2016	10	28	21.3	0.5	26.76
630	03-25-2016	10	29	21.3	0.5	26.76
631	03-25-2016	10	30	21.3	0.5	10.08
632	03-25-2016	10	31	21.3	0.5	0
633	03-25-2016	10	32	21.3	0.6	0
634	03-25-2016	10	33	21.3	0.5	0
635	03-25-2016	10	34	21.3	0.5	0
636	03-25-2016	10	35	21.3	0.4	0
637	03-25-2016	10	36	21.3	0.6	0
638	03-25-2016	10	37	21.3	0.5	0
639	03-25-2016	10	38	21.3	0.5	0
640	03-25-2016	10	39	21.3	0.3	97.59
641	03-25-2016	10	40	21.3	0.3	73.63
642	03-25-2016	10	41	21.3	0.4	0.15
643	03-25-2016	10	42	21.3	0.4	0.16
644	03-25-2016	10	43	21.3	0.4	0.16
645	03-25-2016	10	44	21.3	0.3	0.18
646	03-25-2016	10	45	21.3	0.4	0.16

Avg Vm 0325

ID	Date	HR	Mm	O2-D (%)	CO (ppmvd)	OPACITY (%)
647	03-25-2016	10	46	21.3	0.4	9.39
648	03-25-2016	10	47	21.3	0.4	9.51
649	03-25-2016	10	48	21.3	0.3	9.51
650	03-25-2016	10	49	21.3	0.4	9.54
651	03-25-2016	10	50	21.3	0.4	20.06
652	03-25-2016	10	51	21.3	0.4	20.06
653	03-25-2016	10	52	21.3	0.4	20.06
654	03-25-2016	10	53	21.3	0.4	21.39
655	03-25-2016	10	54	21.3	0.3	32.96
656	03-25-2016	10	55	21.3	0.4	32.96
657	03-25-2016	10	56	21.3	0.3	32.96
658	03-25-2016	10	57	21.3	0.3	0.22
659	03-25-2016	10	58	21.3	0.4	0.21
660	03-25-2016	10	59	21.3	0.4	0.22
661	03-25-2016	11	0	21.3	0.4	9.73
662	03-25-2016	11	1	21.3	0.5	9.73
663	03-25-2016	11	2	21.3	0.4	9.76
664	03-25-2016	11	3	21.3	0.3	20.31
665	03-25-2016	11	4	21.3	0.4	20.31
666	03-25-2016	11	5	21.3	0.5	20.31
667	03-25-2016	11	6	21.3	0.3	32.86
668	03-25-2016	11	7	21.3	0.4	32.87
669	03-25-2016	11	8	21.3	0.3	32.9
670	03-25-2016	11	9	21.3	0.4	0.24
671	03-25-2016	11	10	21.3	0.4	0.25
672	03-25-2016	11	11	21.3	0.4	0.24
673	03-25-2016	11	12	21.3	0.4	9.2
674	03-25-2016	11	13	21.3	0.4	9.7
675	03-25-2016	11	14	21.3	0.3	9.69
676	03-25-2016	11	15	21.3	0.3	20.19
677	03-25-2016	11	16	21.3	0.3	20.19
678	03-25-2016	11	17	21.3	0.4	20.19
679	03-25-2016	11	18	21.3	0.3	32.7
680	03-25-2016	11	19	21.3	0.4	33.05

Avg1Mn0325

ID	Date	Hr	Min	O2 Dry (%)	CO (ppmvd)	OPACITY (%)
681	03-25-2016	11	20	21.3	0.3	33.05
682	03-25-2016	11	21	21.3	0.3	5.08
683	03-25-2016	11	22	21.3	0.3	0.28
684	03-25-2016	11	23	21.3	0.3	0.28
685	03-25-2016	11	24	21.3	0.2	9.07
686	03-25-2016	11	25	21.3	0.2	9.73
687	03-25-2016	11	26	21.3	0.2	9.73
688	03-25-2016	11	27	21.3	0.2	9.73
689	03-25-2016	11	28	21.3	0.3	20.38
690	03-25-2016	11	29	21.3	0.2	20.38
691	03-25-2016	11	30	21.3	0.2	20.41
692	03-25-2016	11	31	21.3	0.2	32.93
693	03-25-2016	11	32	21.3	0	32.96
694	03-25-2016	11	33	21.3	0.3	32.96
695	03-25-2016	11	34	21.3	0.2	0.31
696	03-25-2016	11	35	21.3	0.2	0.31
697	03-25-2016	11	36	21.3	0.1	0.31
698	03-25-2016	11	37	21.3	0.3	9.73
699	03-25-2016	11	38	21.3	0.3	9.73
700	03-25-2016	11	39	21.3	0.3	9.73
701	03-25-2016	11	40	21.3	0.2	20.41
702	03-25-2016	11	41	21.3	0.3	20.41
703	03-25-2016	11	42	21.3	0.2	20.41
704	03-25-2016	11	43	21.3	0.3	33.02
705	03-25-2016	11	44	21.3	0	33.09
706	03-25-2016	11	45	21.3	0.1	32.59
707	03-25-2016	11	46	21.3	0.2	0.85
708	03-25-2016	11	47	21.3	0	0.31
709	03-25-2016	11	48	21.3	0	0.31
710	03-25-2016	11	49	21.3	0.2	0.31
711	03-25-2016	11	50	21.3	0	0.31
712	03-25-2016	11	51	21.3	0.2	0.31
713	03-25-2016	11	52	21.3	0.2	0.34
714	03-25-2016	11	53	21.3	0.1	9.8

Avg1Mn0325						
ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACITY (%)
715	03-25-2016	11	54	21.3	0	9.79
716	03-25-2016	11	55	21.3	0	9.83
717	03-25-2016	11	56	21.3	0	9.8
718	03-25-2016	11	57	21.3	0.2	9.83
719	03-25-2016	11	58	21.3	0	9.83
720	03-25-2016	11	59	21.3	0	20.29
721	03-25-2016	12	0	21.3	0	20.28
722	03-25-2016	12	1	21.3	0.1	20.31
723	03-25-2016	12	2	21.3	0.2	20.34
724	03-25-2016	12	3	21.3	0.2	20.44
725	03-25-2016	12	4	21.3	0	20.63
726	03-25-2016	12	5	21.3	0	32.62
727	03-25-2016	12	6	21.3	0.3	33.08
728	03-25-2016	12	7	21.2	0.2	33.09
729	03-25-2016	12	8	21.3	0.3	33.15
730	03-25-2016	12	9	21.3	0.2	33.14
731	03-25-2016	12	10	21.3	0.2	33.18
732	03-25-2016	12	11	21.3	0	0.43
733	03-25-2016	12	12	21.2	0	0
734	03-25-2016	12	13	21.3	0	0
735	03-25-2016	12	14	21.3	0	0
736	03-25-2016	12	15	21.3	0	0
737	03-25-2016	12	16	21.2	0.2	0
738	03-25-2016	12	17	21.3	0.1	0
739	03-25-2016	12	18	21.3	0.2	0
740	03-25-2016	12	19	21.3	0	1.13
741	03-25-2016	12	20	21.3	-0.1	1.06
742	03-25-2016	12	21	21.2	0	26.76
743	03-25-2016	12	22	21.3	0	10.08
744	03-25-2016	12	23	21.2	0	10.08
745	03-25-2016	12	24	21.3	0	0
746	03-25-2016	12	25	21.2	0	0
747	03-25-2016	12	26	21.2	0	0
748	03-25-2016	12	27	21.2	0	0

AVg1 Min0325

ID	Date	Hr	Min	O2-D (%)	CO (ppmvd)	OPACITY (%)
749	03-25-2016	12	28	21.2	0	0
750	03-25-2016	12	29	21.2	0	0
751	03-25-2016	12	30	21.2	0	0
752	03-25-2016	12	31	21.2	0	0
753	03-25-2016	12	32	21.2	0.2	0
754	03-25-2016	12	33	21.2	0	0
755	03-25-2016	12	34	21.2	0	0
756	03-25-2016	12	35	21.2	0	0
757	03-25-2016	12	36	21.2	0	0
758	03-25-2016	12	37	21.2	0	0
759	03-25-2016	12	38	21.2	0.1	0
760	03-25-2016	12	39	21.2	0	0
761	03-25-2016	12	40	21.2	0	0
762	03-25-2016	12	41	21.2	-0.1	0
763	03-25-2016	12	42	21.2	0.2	0
764	03-25-2016	12	43	21.2	0	0
765	03-25-2016	12	44	21.2	0	0
766	03-25-2016	12	45	21.2	0	0
767	03-25-2016	12	46	21.2	0.1	0
768	03-25-2016	12	47	21.2	0	0
769	03-25-2016	12	48	21.2	0	0
770	03-25-2016	12	49	21.2	0	0
771	03-25-2016	12	50	21.2	0	0
772	03-25-2016	12	51	21.2	0	0
773	03-25-2016	12	52	21.2	0.2	0
774	03-25-2016	12	53	21.2	0	0
775	03-25-2016	12	54	21.2	0	0

CK Environmental

APPENDIX C

OPACITY FILTER & CALIBRATION GAS CERTIFICATES

Maine Oxy
Spec-Air Specialty Gases
Auburn, ME

MAINE

Plus

EPA Protocol

Gas Mixture

Customer:	Maine Oxy/ Spec-Air	Reference#:	013014SY-I.
CGA:	350	Certification Date:	2/04/2014
Customer PO#:	154238	Expiration Date:	2/04/2022
Cylinder #:	EB0054499	Pressure psig:	2000

Method: This standard was analyzed according to EPA 'Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, Procedure G1 (May 2012).

Analyzed Cylinder:

Components	Certified Concentration	Expanded Uncertainty
Carbon Monoxide	76.0ppm	02%
Oxygen	5.01%	03%
Nitrogen	Balance	

Reference Standard:

Type/SRM Sample	Cylinder #	Concentration
Carbon Monoxide/GMIS	EB0040771	97.8ppm
Oxygen/GMIS	MAN-6778	5.00%

Instrument:

Instrument/ Model	Serial Number	Last Date Calibrated	Analytical Method
Micro GC/MTI M200	170612	2/4/2014	TCD

These mixtures were prepared gravimetrically using a high load high sensitivity electronic scale. Prior to filling the scale is verified for accuracy throughout the target mass range against applicable NIST traceable weights. We certify that the weights are calibrated to ASTM E617-97 Echelon 1 tolerances

The reported expanded uncertainty of measurement is stated as the combined standard uncertainty of measurement multiplied by the coverage factor k (k=2) such that the coverage probability corresponds to approximately 95 %.

This report states accurately the results of the investigation made upon the material submitted to the analytical laboratory. Every effort has been made to determine objectively the information requested. However, in connection with this report, Global Calibration Gases LLC shall have no liability in excess of the established charge for this service. Assayed at Global Calibration Gases LLC, Sarasota, Florida.

The calibration results published in this certificate were obtained using equipment and standards capable of producing results that are traceable to National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI). The expanded uncertainties, if included on this certificate, use a coverage factor of k=2 to approximate the 95% confidence level of the measurement, unless otherwise noted. If uncertainties are not included on this certificate, they are available upon request. This calibration certificate applies only to the item described and shall not be reproduced other than in full, without written approval from the calibration facility. Calibration certificates without signatures are not valid. This calibration meets the requirements of ISO/IEC 17025:2005

*Do not use this standard when cylinder pressure is below 150 psig.

Produced by: Global Calibration Gases LLC.
1090 Commerce Blvd N
Sarasota, Florida 34243
Accreditation No.: 69191
PGVP Vendor ID.: N22014

GLOBAL CALIBRATION GASES LLC

Principal Analyst: _____
Date: 2/4/2014

Principal Reviewer: _____
Date: 2/10/2014

Maine Oxy
Spec-Air Specialty Gases
Auburn, ME

MAINE

Plus

EPA Protocol
Gas Mixture

Customer:	Maine Oxy Spec-Air	Reference#:	013014SY-K
CGA:	590	Certification Date:	2/04/2014
Customer PO#:	164238	Expiration Date:	2/04/2022
Cylinder #:	EB0054497	Pressure psig:	2000

Method: This standard was analyzed according to EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, Procedure G1 (May 2012).

Analyzed Cylinder-

Components	Certified Concentration	Expanded Uncertainty
Carbon Monoxide	167 8ppm	0.5%
Oxygen	10.00%	0.2%
Nitrogen	Balance	

Reference Standard-

Type/SRM Sample	Cylinder #	Concentration
Carbon Monoxide/GMIS	EB0040771	97.8ppm
Oxygen/GMIS	TW04-770790	15.06%

Instrument-

Instrument/ Model	Serial Number	Last Date Calibrated	Analytical Method
Micro GC/MTI M200	170612	2/4/2014	TCD

These mixtures were prepared gravimetrically using a high load high sensitivity electronic scale. Prior to filling the scale is verified for accuracy throughout the target mass range against applicable NIST traceable weights. We certify that the weights are calibrated to ASTM E617-97 Corrosion 1 tolerances

The reported expanded uncertainty of measurement is stated as the combined standard uncertainty of measurement multiplied by the coverage factor k (k=2) such that the coverage probability corresponds to approximately 95 %.

This report states accurately the results of the investigation made upon the material submitted to the analytical laboratory. Every effort has been made to determine objectively the information requested. However, in connection with this report, Global Calibration Gases LLC shall have no liability in excess of the established charge for this service. Assayed at Global Calibration Gases LLC, Sarasota, Florida

The calibration results published in this certificate were obtained using equipment and standards capable of producing results that are traceable to National Institute of Standards and Technology (NIST) and through NIST to the International System of Units (SI). The expanded uncertainties, if included on this certificate, use a coverage factor of k=2 to approximate the 95% confidence level of the measurement, unless otherwise noted. If uncertainties are not included on this certificate, they are available upon request. This calibration certificate applies only to the item described and shall not be reproduced other than in full, without written approval from the calibration facility. Calibration certificates without signatures are not valid. This calibration meets the requirements of ISO/IEC 17025:2005

*Do not use this standard when cylinder pressure is below 150 psig

Produced by: Global Calibration Gases LLC.
1090 Commerce Blvd N
Sarasota, Florida 34243
Accreditation No : 69191
PGVP Vendor ID.: N22014

GLOBAL CALIBRATION GASES LLC

Principal Analyst: _____
Date: 2/4/2014

Principal Reviewer: _____
Date: 2/10/2014

Environmental Monitor Service, Inc.
PO Box 4340
Yalesville, CT 06492
Phone (203) 935-0102 Fax (203) 634-6663

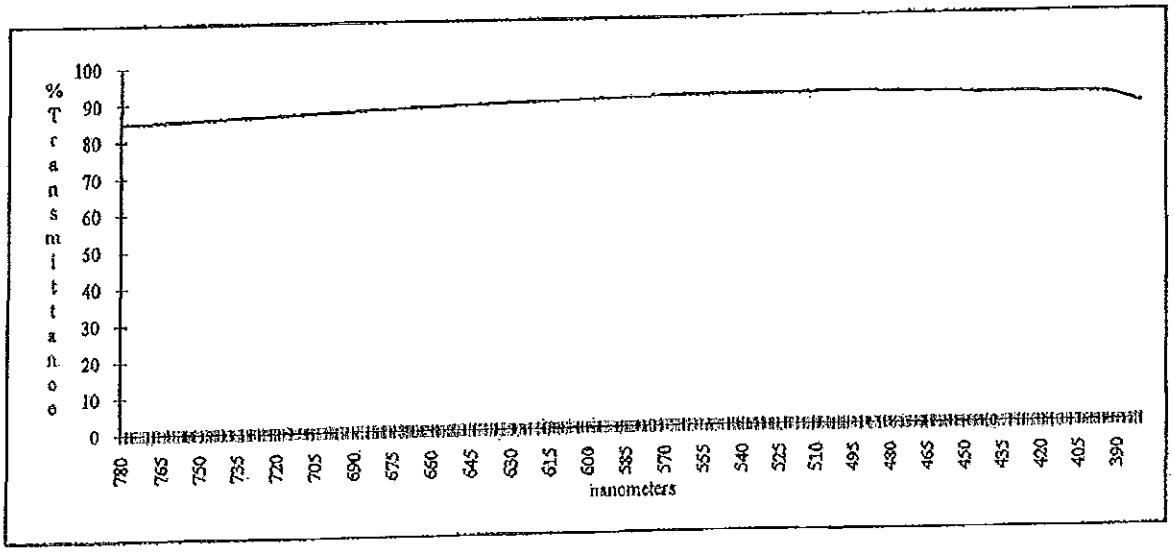
NEUTRAL DENSITY FILTER CERTIFICATION

Environmental Monitor Service, Inc., hereby certifies that the following Neutral Density Filter (NDF) has been calibrated on a Perkin-Elmer Lambda Series 25 / Spectrophotometer (Serial number 101N3071604) meeting design specifications contained in the Code of Federal Regulations 40 CFR 60, Appendix B, Performance Specification 1, Section 6.3.
The filters are scanned over the visible region and the resulting transmittances of the filter are weighted to the Source C Human Eye Response by multiplying each value by its associated response factor. The corrected values of transmittance are converted to %Opacity and the value is recorded on the filter and associated chart.

NOTE: In accordance with 40CFR60, Appendix B, Performance Specification1, Section 7.2 (v), effective August 9, 2000, Recalibrate the primary attenuators semi-annually if they are used for the required calibration error test. Note: State agencies may require more frequent calibrations check with your local Authorities.

Tested by: D. Bissoni

Serial Number: F684
Opacity: 9.74%
O.D.: 0.045
Scan date: November 9, 2015
Transmittance: 0.903



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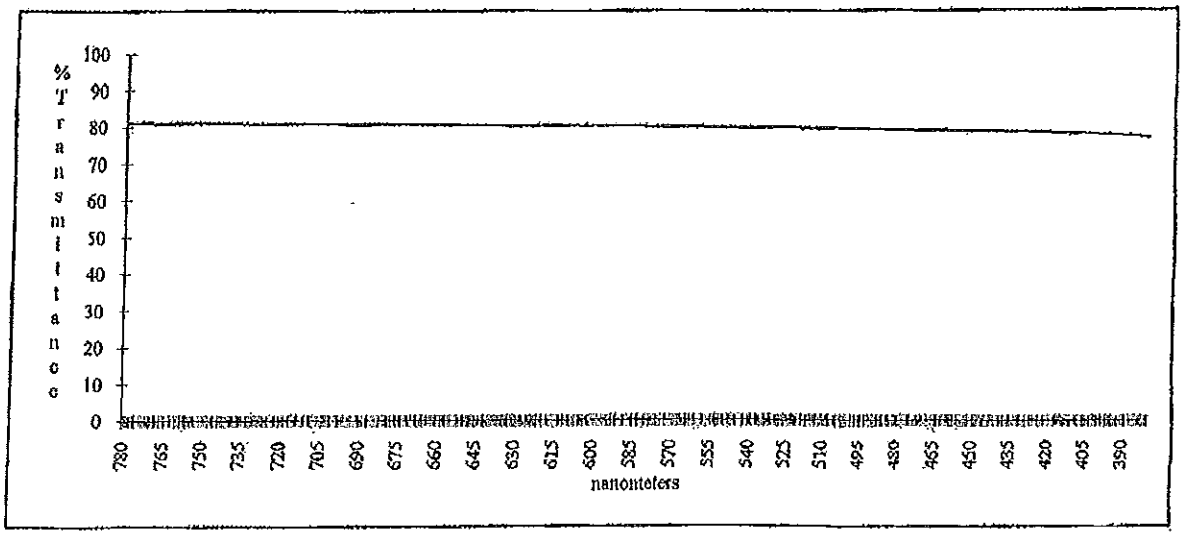
The filters are scanned over the visible region and the resulting transmittances of the filter are weighted to the Source C Human Eye Response by multiplying each value by its associated response factor. The corrected values of transmittance are converted to %Opacity and the value is recorded on the filter and associated chart.

NOTE: In accordance with 40CFR60, Appendix B, Performance Specification1, Section 7.2 (v), effective August 9, 2000, Recalibrate the primary attenuators semi-annually if they are used for the required calibration error test. Note: State agencies may require more frequent calibrations check with your local Authorities.

Tested by: D. Bissoni

Serial Number: F359
Opacity: 19.96%
O.D.: 0.097
Scan date: November 9, 2015
Transmittance: 0.800



Environmental Monitor Service, Inc.
PO Box 4340
Yalesville, CT 06492
Phone (203) 935-0102 Fax (203) 634-6663

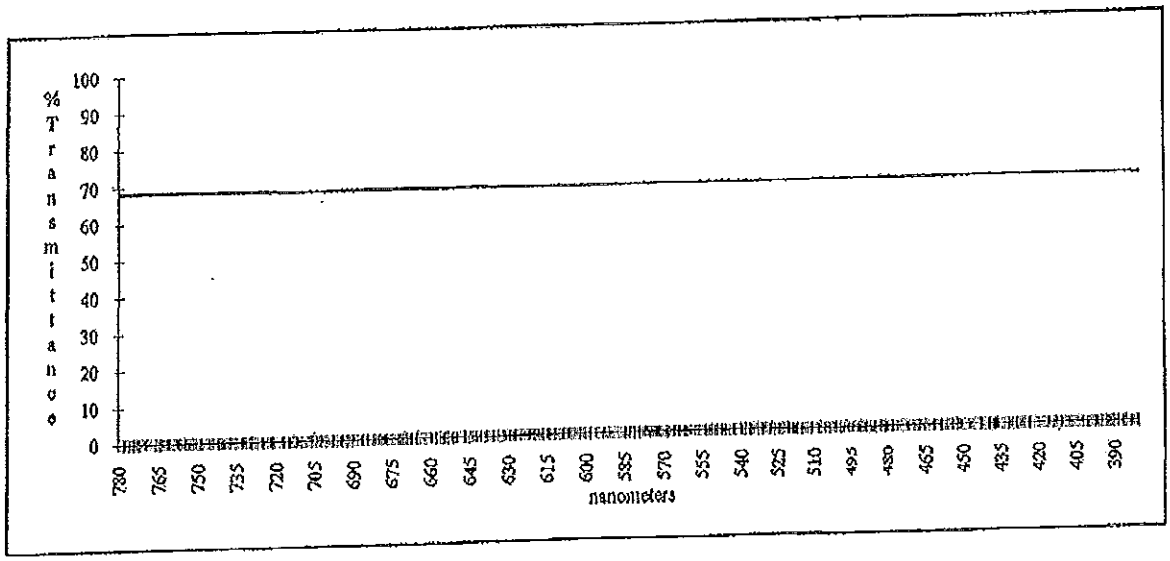
NEUTRAL DENSITY FILTER CERTIFICATION

Environmental Monitor Service, Inc., hereby certifies that the following Neutral Density Filter (NDF) has been calibrated on a Perkin-Elmer Lambda Series 25 / Spectrophotometer (Serial number 101N3071604) meeting design specifications contained in the Code of Federal Regulations 40 CFR 60, Appendix B, Performance Specification 1, Section 6.3.
The filters are scanned over the visible region and the resulting transmittances of the filter are weighted to the Source C Human Eye Response by multiplying each value by its associated response factor. The corrected values of transmittance are converted to %Opacity and the value is recorded on the filter and associated chart.

NOTE: In accordance with 40CFR60, Appendix B, Performance Specification1, Section 7.2 (v), effective August 9, 2000, Recalibrate the primary attenuators semi-annually if they are used for the required calibration error test. Note: State agencies may require more frequent calibrations check with your local Authorities.

Tested by: D. Bissonl

Serial Number:	**G368**
Opacity:	**31.97%**
O.D.:	**0.167**
Scan date:	**November 9, 2015**
Transmittance:	**0.680**



ERA
A Waters Company

Tom Deller
Veolia Water - Naugatuck County
500 Cherry St. Ext.
Naugatuck, CT 06770
USA

WP-254 Final Report

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 03/07/16

Close Date: 04/21/16

Report Issued Date: 04/25/16

ERA

A Waters Company

April 25, 2016

Tom Deller
Veolia Water - Naugatuck County
500 Cherry St. Ext.
Naugatuck, CT 06770

Enclosed is your final report for ERA's WP-254 WatR™Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-254 WatR™Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the current TNI Fields of Proficiency Testing (FoPT) tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the current TNI FoPT tables. If the analyte is not included in the TNI FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (QuiK™Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have many years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be useful in helping you work through your technical issues.

At the request of the TNI Accreditation Council, we have included a Laboratory Exception Report that includes a list of all analytes reported with less than qualifiers when the assigned value was greater than "0." In addition, because we have received many requests from laboratories, this report also includes a list of all analytes with "Not Acceptable" evaluations.

Some states have elected not to convert to the 2009 TNI Standards at this time. If you have released your results to a state that has retained the 2003 NELAC Evaluation Criteria, your final report will include a section that evaluates the results according to the 2003 Standard in addition to the 2009 TNI Standards.

Thank you for your participation in ERA's WP-254 WatR™Pollution Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

Pat Larson

Patrick Larson
Quality Officer

attachments

ERA
A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
Connecticut	Environmental Lab Certification / 860-509-7388	All Analytes	2009 TNI

ERA

A Waters Company

WP-254 Definitions & Study Discussion

Study Dates: 03/07/16 - 04/21/16

Report Issued: 04/25/16

WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI Fields of Proficiency Testing (FoPT) tables. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2009 TNI Standards. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable	= Reported Value falls within the Acceptance Limits.
Not Acceptable	= Reported Value falls outside the Acceptance Limits.
No Evaluation	= Reported Value cannot be evaluated.
Not Reported	= No Value reported.

The Method Description is the method the laboratory reported to ERA.

WP Study Discussion

ERA's WP-254 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) tables.

ERA's WP-254 WatR™Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI PT Standard and the criteria contained in the most current TNI FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-254 WatR™Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™Pollution Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.

WP-254 Laboratory Exception Report

A Waters Company

Tom Deller
Lead Operator
Veolia Water - Naugatuck County
500 Cherry St. Ext.
Naugatuck, CT 06770
(203) 723-1433 x 2004

EPA ID:	**CT00946**
ERA Customer Number:	**N064601**
Report Issued:	**04/25/16**
Study Dates:	**03/07/16 - 04/21/16**

2009 TNI Evaluation Checks

There are no values reported with < where the assigned value was greater than 0.

2009 TNI Not Acceptable Evaluations

There were no Not Acceptable evaluations for this study.

ERA

A Waters Company

Final Report Results For Laboratory
Veolia Water - Naugatuck County

ERA

A Waters Company

2009 TNI Evaluation Report

Study: **WP-254**

ERA Customer Number: **N064601**

Laboratory Name: **Veolia Water - Naugatuck County**

Inorganic Results

WP-254 2009 TNI Evaluation Final Complete Report

ERA
A Waters Company

Tom Deller
Lead Operator
Veolia Water - Naugatuck County
500 Cherry St. Ext.
Naugatuck, CT 06770
(203) 723-1433 x 2004

EPA ID: CT00946
ERA Customer Number: N064601
Report Issued: 04/25/16
Study Dates: 03/07/16 - 04/21/16

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
WP pH (cat# 577, lot# P254-977)												
1900	pH	S.U.	8.33	8.31	8.11 - 8.51	Acceptable	SM4500H+ B online	3/14/2016	0.722	8.27	0.0860	
WP Total Residual Chlorine (cat# 587, lot# P254-501)												
1940	Total Residual Chlorine	mg/L	1.14	1.22	0.906 - 1.45	Acceptable	SM4500Cl G online	3/14/2016	-0.457	1.18	0.0786	

CERTIFICATE OF EXCELLENCE

In recognition of the quality of your laboratory in proficiency testing for

WP-254

Veolia Water - Naugatuck County

is issued this certificate of achievement by ERA. This laboratory has been recognized as a Laboratory of Excellence for achieving 100% acceptable data in this study which included 965 participating laboratories. This achievement is a demonstration of the superior quality of the laboratory in evaluation of the standards listed below.

pH

Total Residual Chlorine

Pat Larson

Patrick Larson
Quality Officer

N064601

News

Red Sox pitcher Craig Kimbrel

SECTION B

SPORTS STARTS ON THE BACK OF THIS SECTION

EPA shuts borough plant

Naugatuck missed deadline to upgrade against pollutants

BY PAUL SINGLEY
REPUBLICAN-AMERICAN

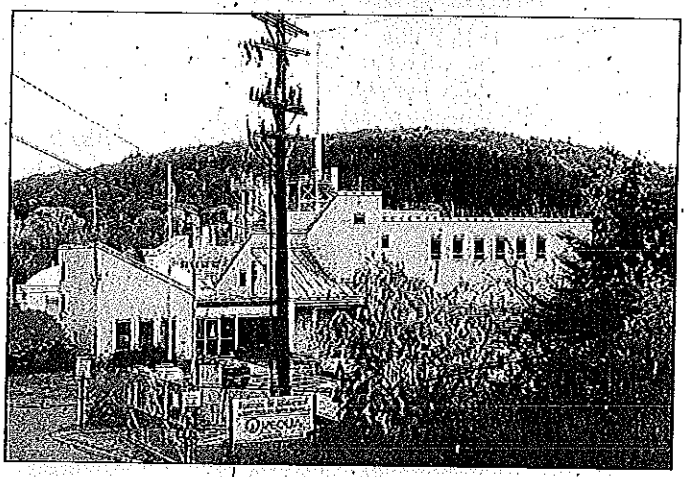
NAUGATUCK — The federal government has shut down the incinerator at Naugatuck's wastewater treatment plant indefinitely as the borough has missed a mandated deadline to reduce pollutants.

The Environmental Protection Agency gave communities until March 22 to make upgrades intended to reduce the amount of phosphorous and other pollutants, such as mercury, they emit.

Because Naugatuck missed the deadline, the EPA followed through with its threat to effectively shut down the entire wastewater treatment process by forcing a shutdown of the incinerator, which treats waste material and converts it into gases, particles and heat.

The borough must make about $86 million worth of

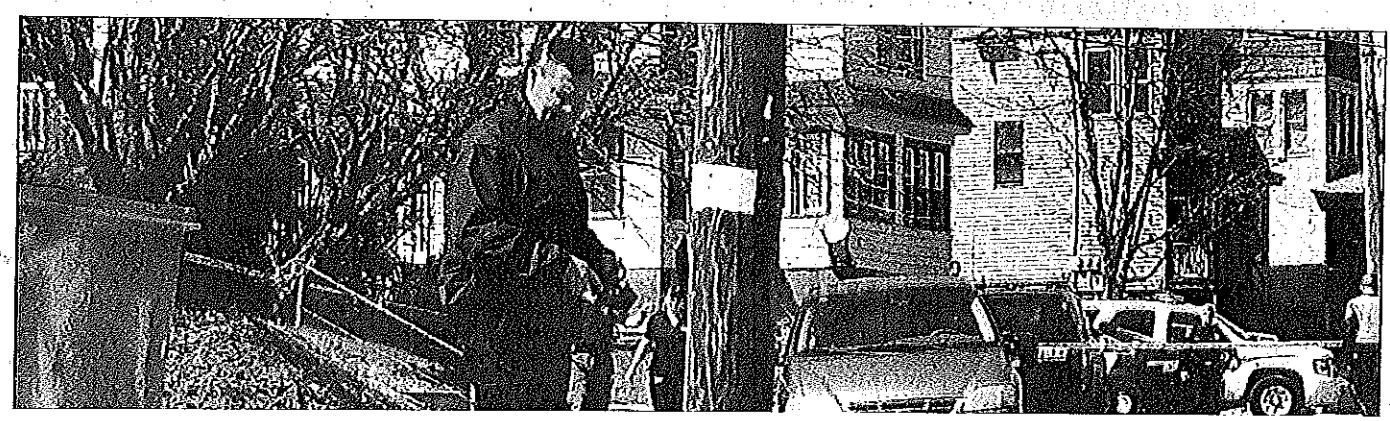
See **PLANT**, *Page* **3B**



REPUBLICAN-AMERICAN ARCHIVES

The incinerator at Naugatuck's wastewater treatment plant, operated by Veolia Water North America, has been shut down by federal environmental officials because Naugatuck has not made upgrades to mitigate pollutants.

RIDER HITS UTILITY POLE



PLANT: Sludge must be taken elsewhere

upgrades to its plant off Cherry Street Extension to be compliant. Thus far, it has only put about $2.1 million into the process, mostly for planning.

Naugatuck could stand to lose money from the plant being shut down because the private company that operates the plant in a partnership with Naugatuck, Veolia Water North America, makes millions of dollars from treating sludge from other communities and private contracts.

Some of that money is shared with the borough through a complicated profit-sharing agreement, which states the amount Veolia must share with Naugatuck is contingent upon how much it makes from treating sludge.

Also, Naugatuck must now temporarily truck its sludge somewhere else to be treated, though that cost is small compared to how much it stands to lose in profit from Veolia. Employees are still working at the plant on upgrades but are not treating waste until the issue with EPA is resolved.

Mayor N. Warren "Pete" Hess said the borough is in discussions with the EPA and has both a short-term plan to bring Naugatuck into compliance over the next 16 months, and a long-term plan for the next 30 years.

"We have reached a potential agreement with EPA as to what needs to be done to be compliant, and we are working with EPA to obtain an interim settlement agreement to allow us to operate during the time in which we are out of compliance," he said.

Naugatuck's share of the $86 million in upgrades would be offset by an estimated $10.7 million from Middlebury, which uses Naugatuck's facility, and an amount to be determined from Oxford, which also taps into the system.

Naugatuck must also make upgrades to its incinerator for $5 million, repairs to its siphon system for $5 million and miscellaneous upgrades to its entire plant to meet new federal standards at a cost of about $15 million, Department of Public Works Director Jim Stewart said.

About $4 million would go toward sewer rehabilitation, he said.

There are additional fees of $1.3 million for a facilities plan and $6 million for a design plan, he said. The borough would have to set aside $19 million for contingency.

Two years ago, the borough put a referendum question on the election ballot that called for $12 million to conduct a study of the project, incinerator upgrades and pollution abatement projects, and installation of a filter to remove mercury from the incinerator output. That failed 3,394 to 4,039.

Last year, Naugatuck officials voted to bond $2.1 million to study the upgrade process, which started the process of upgrading the plant but was not enough to satisfy the EPA.

Part of the argument over the years between Veolia and the borough has been centered around who is responsible for the upgrades.

The issue is further complicated by the fact that Naugatuck and Veolia are embroiled in complex litigation at Waterbury Superior Court over profit-sharing.

Hess said the two sides are talking about ways to resolve that issue and that he is working with Chemtura, the owners of the old Uniroyal Chemical property near the treatment plant, to potentially bring a fuel cell project to the site as a means to reduce Veolia's electricity bill and allow it to bring natural gas to the treatment plant, which would save the company significant money.

Contact Paul Singley at psingley@rep-am.com, on Facebook at RA Naugatuck or on Twitter @RANaugatuck.

PATIO: More outdoor dining in Middlebury

dlebury over the past few years with Maggie McFly's, Pies & Pints and Middlebury Consignment offering patio seating.

Adames started bartending as a teenager at Rutgers University 30 years ago, before working at his family's business, Panchos & Gringos in Brookfield. He owns Senor Panchos restaurant with locations in Southbury, Thomaston and Prospect and opened Ceviche on Sept. 9, 2015.

"It's been a tremendous success," he said. "We've been very well received by the community and surrounding area. We just keep the concept simple. It's a mix of Latin foods and fine wines."

Adames said his patrons had asked him if Ceviche would have outdoor dining and news of the zoning approval spread quickly.

"We're ready to go," he said.

"They're very excited."

CRASH: Driver taken to hospital with injuries

Maple Avenue and tried to stop it, police said. Once again, the car sped up and fled the officer, passing through the intersection of Maple Avenue and West Main Street.

"The operator lost control of his vehicle, striking a utility pole on the western shoulder. The vehicle spun around, striking a second utility pole, before coming to an uncontrolled stop in the northbound lane," police said.

The driver was partially ejected from his seat. Officers helped remove the driver and began giving him medical aid before Campion Ambulance and the Cheshire Fire Department arrived to assist, police said.

The driver was taken to Saint Mary's Hospital with non-life-threatening injuries. Police are still investigating the incident and are not releasing the identity of the driver. They did not say whether they had identified a reason the driver fled.

Main Street was closed for about four hours due to the accident.

Boards OK budget proposal

Mayor encouraging referendum to buy more time

Citizen News
April 29, 2016

By Luke Marshall
Staff Writer

NAUGATUCK — Borough officials are moving forward with a budget proposal that would increase the mill rate more than 4 mills.

After deliberating into the late night Monday, the Joint Boards of Mayor and Burgesses and Board of Finance approved a proposed $119.95 million budget for the 2016-17 fiscal year. The proposal is an increase of $4.68 million, or 4.06 percent, over the current budget.

The proposed school budget is flat at $61.68 million, while the proposal increases municipal spending $4.68 million, or 8.74 percent, to $58.26 million.

Under the proposed budget, the mill rate would increase 4.15 mills from 45.57 to 49.72.

The mill rate is the amount of taxes payable on the assessed value of a home. One mill equals $1 for every $1,000 of assessed value. Under a 49.72 mill rate, a home assessed at $150,000 will pay $7,458 in taxes, an increase of $622.

"You've been handed a very difficult draft budget," Mayor N. Warren "Pete" Hess told the joint boards. "Obviously [the mill rate increase] is unacceptable to us."

The budget will now go to a public hearing May 2 at 6:30 p.m. at Naugatuck High School.

One the major increases in the proposed budget comes in debt services. The borough will begin paying back bonds taken out for the $81 million Naugatuck High School renovation project and future upgrades at the wastewater treatment plant. Debt services is set to increase about $2.03 million.

Public safety is also a major driver of the increase.

The proposed fire department budget is $4.65 million, an increase of $745,043 or 19.06 percent.

The budget includes filling two of the four vacant firefighter positions.

"It's not above and beyond. It is because we didn't fund, over the years, replacements. So we are not bringing them back to the full force, but at least they will be a little bit better," Board of Finance member Andrew Bottinick said.

The increase in the number of firefighters will ultimately decrease the department's overtime budget, Board of Finance Chairwoman Diane Scinto

See BUDGET, page 9

BUDGET

From page 1

said. However, with seven fire fighters planning on retiring this year and the new hires to replace them having to go through the fire academy, overtime is proposed to increase $338,817.

The proposed police department budget is $7.16 million, an increase of $623,341 or 9.53 percent.

The budget includes hiring one new officer and restoring the salary of an officer who is coming off of workers' compensation, Controller Robert Butler said.

Due to retirements in the police department throughout the current fiscal year, the department's employee retirement fund is projected to increase $166,507.

The borough is also dealing with projected losses in revenue, namely from the wastewater treatment plant.

"The biggest elephant in the room is our wastewater treatment plant issue," Hess said. "The budget you have before you is assuming zero rent from Veolia [Water North America]. This is the worst-case scenario on the rent."

Veolia runs the borough-owned plant. The plant's incinerator was shut down last month because it was not in compliance with current Environmental Protection Agency standards.

The shutdown means that Veolia isn't paying rent to the borough since it is not operating the plant. This year, the borough received $2.15 million in rent from Veolia.

Hess said the borough is currently in negotiations with Veolia, the state Department of Energy and Environmental Protection, and the EPA regarding the treatment plant. He said he is trying to resolve issues at the plant in hopes of saving Naugatuck money. The borough may be able to increase rent significantly in negotiations.

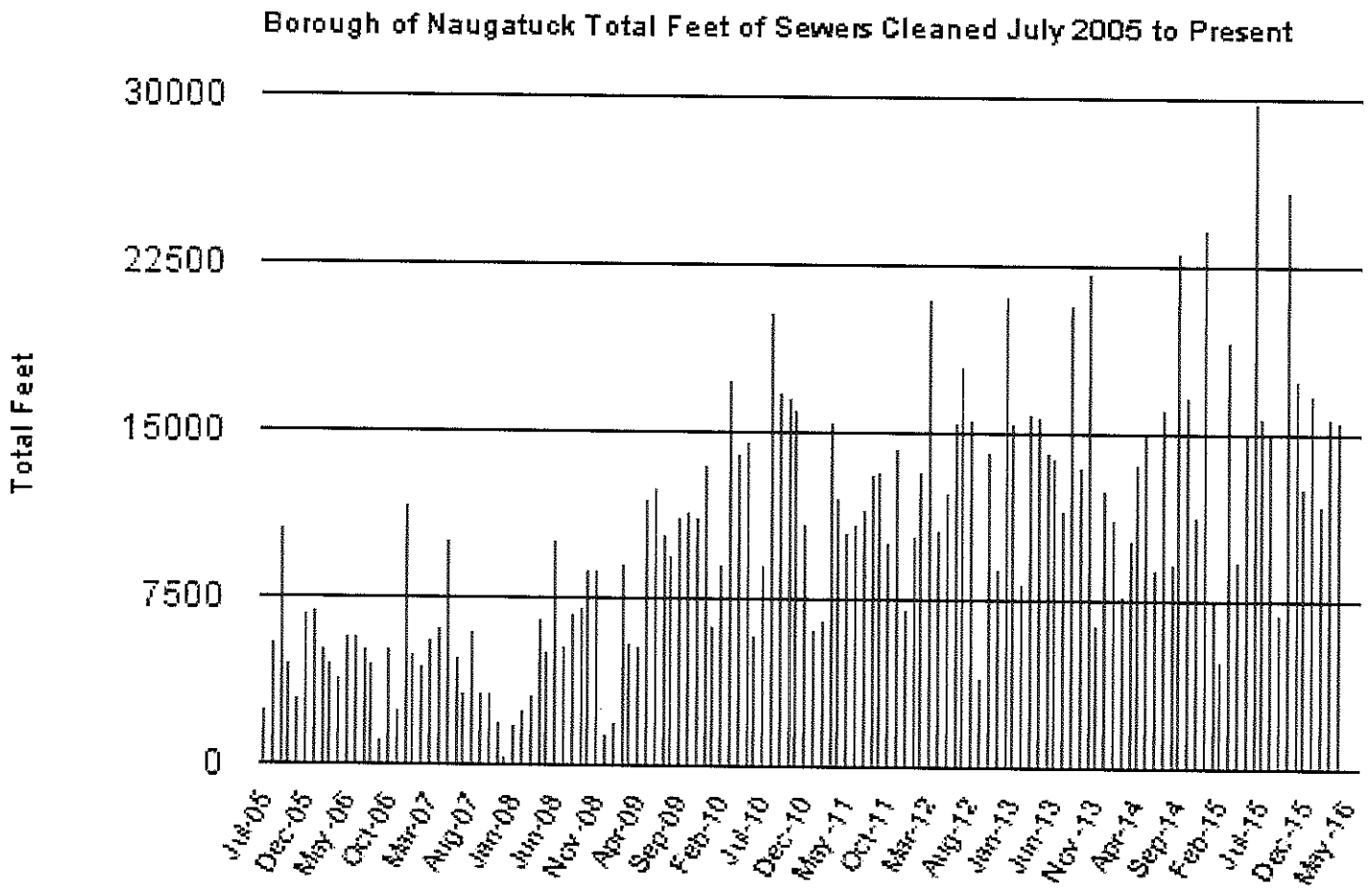
Hess encouraged residents to force a referendum on the budget to provide more time to resolve the matter with Veolia and so the borough can have clearer revenue figures from the state before final adoption of the budget.

If a resolution is reached with Veolia, the rent paid to the borough would be revenue that would decrease the proposed mill rate.

"If we don't adopt our budget for 60 to 90 days because of budget referendums it may actually work to our advantage," Hess said. "So it would be unusual to root for a referendum, but in this particular case the longer we have to craft our numbers the more accurate we can be."

While he's hoping a referendum would push final budget adoption to a later date, Hess instructed the joint boards to craft the best budget possible with the available numbers.

"I think our charge is going to be to do the best we can with what we have here, keeping the worst-case scenario in play until we have more information," Hess


Borough of Naugatuck Total Feet of Sewers Cleaned July 2005 to Present
Total Feet
30000
22500
15000
7500
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Jul-05
Dec-05
May-06
Oct-06
Mar-07
Aug-07
Jan-08
Jun-08
Nov-08
Apr-09
Sep-09
Feb-10
Jul-10
Dec-10
May-11
Oct-11
Mar-12
Aug-12
Jan-13
Jun-13
Nov-13
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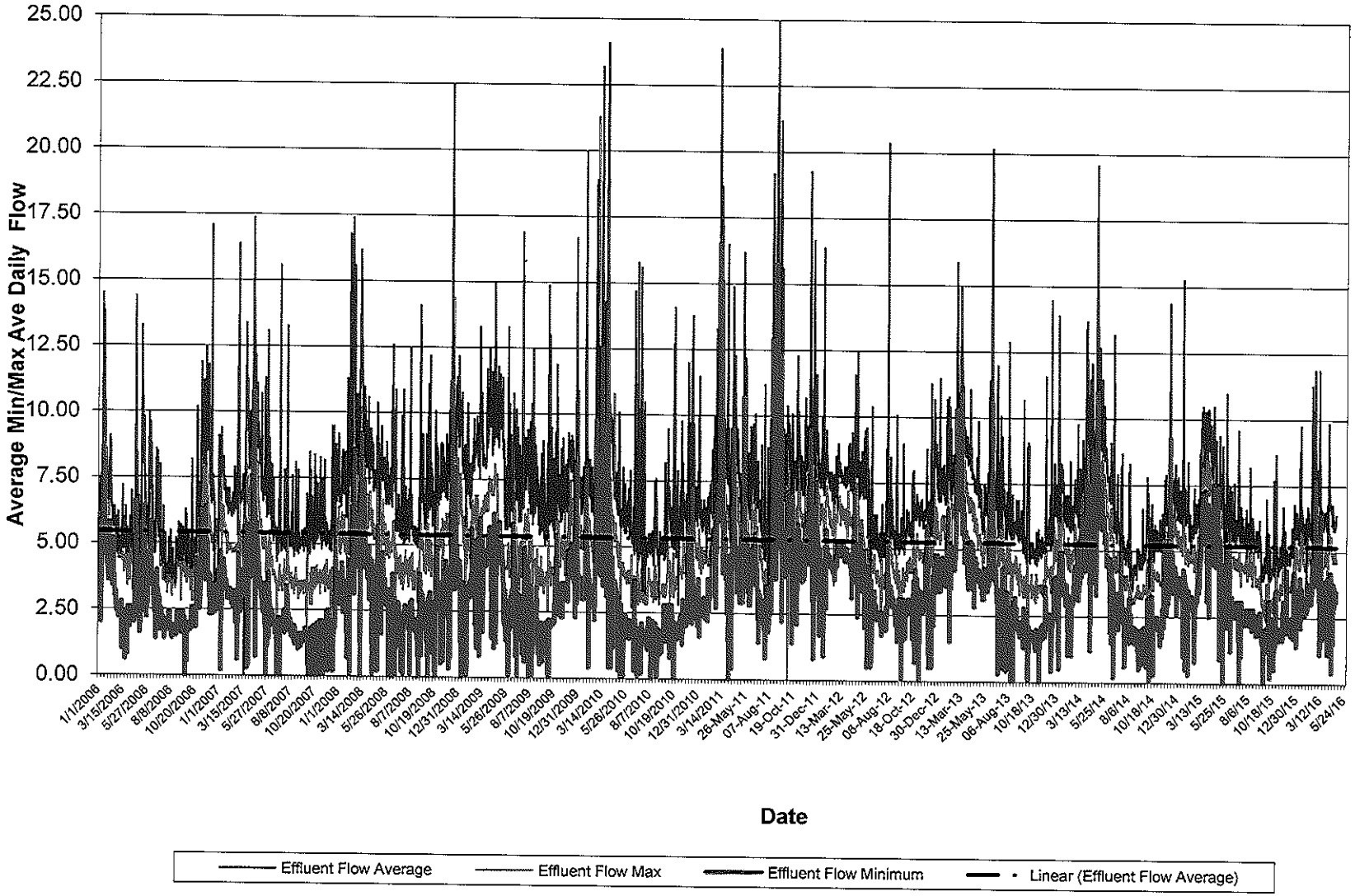
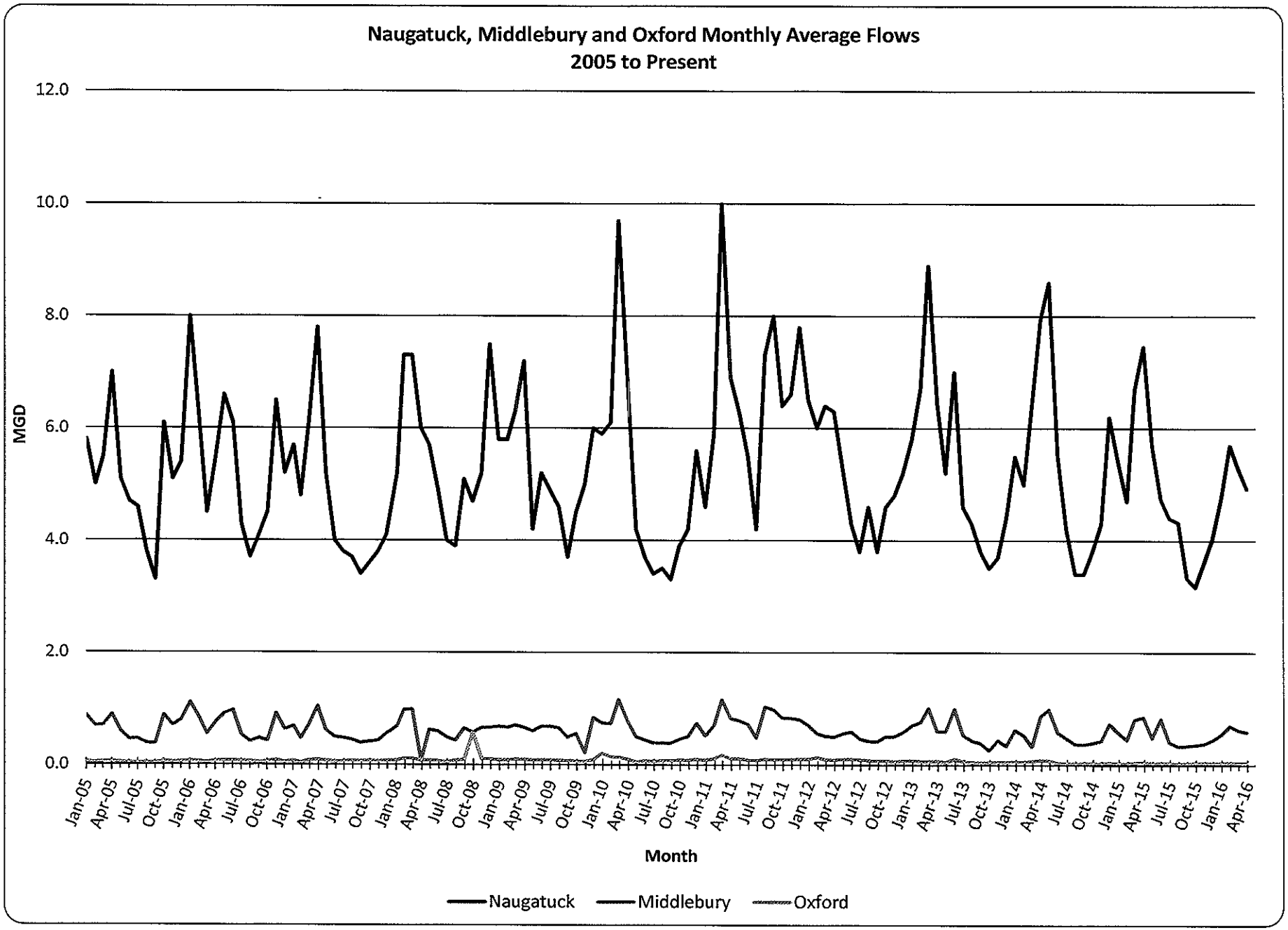
Jul-15
Dec-15
May-16

Naugatuck WPCF Daily Min/Max/Total Flow Data
2006 to Present MGD




Naugatuck, Middlebury and Oxford Monthly Average Flows
2005 to Present
12.0
10.0
8.0
6.0
4.0
2.0
0.0
MGD
Jan-05
Apr-05
Jul-05
Oct-05
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Oct-15
Jan-16
Apr-16
Month
Naugatuck
Middlebury
Oxford