



December 10, 2015

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

**Re: November 2015 Monthly Operating Report**

Dear Mr. Merancy:

Enclosed please find Veolia Water's Monthly Operating Report for the month of November 2015.

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

Sincerely,  
Veolia Water North America – Northeast, LLC

A handwritten signature in cursive script that reads "John Batorski".

John Batorski  
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)

**Borough of Naugatuck  
Monthly WPCF Report Nov 2015**

This report summarizes the activities at the Borough POTW for Nov 2015:

**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.	-	439
Effluent Avg.	30	5
Removal Efficiency	85%	99%
Plant Process Data*	Limit	Actual
Carbonaceous BOD (mg/l)		
Influent Avg.	-	518
Eff Avg(Nov 1 – May 31)	25	
Eff Avg(June – Oct 31)	15	4
Removal Efficiency	85%	99%

Discharge Permit Exceedance: None

	<b>Naugatuck</b>	<b>Middlebury</b>	<b>Oxford</b>	<b>OTR</b>
<b>Nov Flow Avg. (MGD)</b>	3.6	0.378	0.043	N/A
Sludge Liquid Total (MGal)				4706.1
Sludge Cake Total (Wet Tons)				4158.3
Septage Total (MGal)	75,390	27,000	173,750	664,650
Discharge Permit Exceedance: None				

**Safety Incidents and Odor Complaints**

	Month	YTD
Recordable Accidents	0	0
Lost Time Accidents	0	0
Odor Complaints	1	8
Unconfirmed Odor Complaints	1	1

**1. Compliance & Regulatory Issues**

- a. On Nov 12, 2015 a meeting was held at CTDEEP on incinerator emissions. A Compliance Report in addition to a plan on how the MACT will be achieved is due before March 2016 if an extension is to be considered by EPA. Basically, CTDEEP stated a conversation should be taking place sooner than later regarding compliance with the new regulations.
- b. On Nov 30 a meeting was held with V. Martin, D. Gorka, J. Stewart and Mayor P. Hess to discuss incinerator MACT upgrades, P removal and related topics.

**2. Odor Complaints**

- a. There were 2 odor complaints in November.

**3. Personnel**

- a. No report.

**4. Health & Safety**

- a. The safety meeting was held on Nov.9 & 10<sup>th</sup>. Thermal Fluid emergencies/training and were the topics.

## **5. Operational Information**

- a. An emulsion polymer trial for the centrifuges revealed no significant change in dosage or cost savings. We will work with the supplier to further optimize polymer feed.
- b. The aeration tank internal recycle pump failed and was replaced.

## **6. Collections**

- a. A call for service was requested for 87 Spencer Street on Nov 1, 2015. The call stated it was a missing manhole. Collections responded and could not locate the missing manhole. The manhole turned out to be a missing valve cover from a buried potable water meter valve.

## **7. Maintenance**

- a. The North centrifuge was installed
- b. The south ash slurry pump was replaced
- c. Two of six sludge cake silo discharge conveyors were changed as well as the 53 FT conveyor.
- d. In Dec. plows will be replaced on the thermal dryer on days when the sludge inventory is low.
- e. The main shafts and silicon carbide plates for the bombay doors on the venturi were replaced during a day when the sludge volume was low. Ceramic refractory was applied to the flooded elbow and transition to the tray scrubber.

## **8. Capital Projects**

- a. No report.

Borough of Naugatuck  
Collections Systems Report  
November 2015



Cable Jaw Services	
1	11078 - Naugatuck High School - cable jammed
2	11079 - 28 Woodcrest Dr - lateral problem
3	11080 - Naugatuck High School - cable jammed
4	11081 - 611 1st St - cable jammed - lateral problem
5	11082 - 338 Cherry St
6	11083 - 374 Parker Ave - lateral problem
7	11084 - 24 Cherry St

This Month	7
Year to Date	21

Cable Caught by Collection System	
1	218 Cherry St - main line was blocked
2	24 Cherry St - main line was blocked
3	
4	

Reason
Grease and debris at trap
Grease and debris in line and trap back up

Water Inquiries			
	Street Name	Type	Priority
1	1100115 - Plumbing Road Dr - 11-23 to 11-23	oak	200
2	1100116 - Naugatuck High School crawl yard	oak	200
3	1100117 - CMI Dr 2000A to 2000A	oak	100
4	1100118 - CMI Dr 2000A to 2000A	oak	200
5	1100119 - Cherry St sewerage	oak	40
6			
7			
8			
9			
10			

This Month	1507	Open	Year to Date	1507	Open
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High Velocity Clearing			
	Street Name	Date	Priority
1	Green St 8:30A to 8:37	11/03/15	200
2	Green St 8:37 to 8:38A	11/03/15	200
3	Green St 8:38 to 8:39	11/03/15	200
4	Green St 7:30A to 7:30A	11/03/15	200
5	Green St 7:30A to 8:15A	11/03/15	200
6	Washington Ave 8:15 to 8:15A	11/03/15	200
7	St. Charles St 8:30A to 8:30A	11/03/15	100
8	Greenway St 12:17 to 12:4	11/03/15	200
9	Greenway St 8:22A to 8:22A	11/03/15	200
10	Greenway St 8:22A to 8:22A	11/03/15	200
11	Wood St 10:21A to 10:21A	11/03/15	200
12	Wood St 10:21A to 10:17	11/03/15	200
13	Green St 8:15A to 8:15A	11/03/15	200
14	Naugatuck High School crawl yard	11/03/15	200

Greenway St
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15	Washington St 8:20A to 8:20A	11/10/15	200
16	Washington St 8:15A to 8:15A	11/10/15	200
17	St. Charles St 8:15A to 8:15A	11/10/15	200
18	St. Charles St 8:15A to 8:15A	11/10/15	200
19	Washington St 8:15A to 8:15A	11/10/15	200
20	City Hall School 7:20A to 7:20A	11/10/15	200
21	Greenway St 8:15A to 8:15A	11/10/15	200
22	Wood St 8:21 to 8:21	11/10/15	200
23	Washington St 8:15A to 8:15A	11/10/15	200
24	Greenway St 8:20A to 8:20A	11/10/15	200
25	Greenway St 8:20A to 8:20A	11/10/15	200
26	Washington St 8:15A to 8:15A	11/10/15	200
27	Washington St 8:15A to 8:15A	11/10/15	200

28	Franklin St. 141 to 142	11/18/2015	200
29	Franklin St. 142 to 143	11/18/2015	200
30	George St. 141 to 142	11/18/2015	200
31	Washington St. 141 to 142	11/18/2015	200
32	Shawmut St. 141 to 142	11/18/2015	200
33	Terrace Ave. 141 to 142	11/18/2015	200
34	Prospect St. 141 to 142	11/18/2015	200
35	Prospect St. 141 to 142	11/18/2015	200
36	Washington St. 141 to 142	11/18/2015	200
37	Prospect St. 141 to 142	11/18/2015	200
38	Franklin Ave. 141 to 142	11/18/2015	200
39	Prospect St. 141 to 142	11/18/2015	200
40	Prospect St. 141 to 142	11/18/2015	200

**Root Treatment**

41	Cherry St. 141 to 142	11/18/2015	200
42	Cherry St. 141 to 142	11/18/2015	200

43			
44			
45			
46			
47			
48			
49			
50			
51			

**Flow Meter**      **Year to Date**  
 17342      Feet      2015      Feet

Serial #	Date	Amount
1		
2		
3		

**Flow Meter**      **Year to Date**  
 1      Feet      2015      Feet

Serial #	Date	Amount
1		
2		
3		
4		
5		
6		
7		

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Pump 3
Inwood	End Reading	222.00	222.7	222.2
	Start Reading	221.00	222.2	221.1
	Hrs Run	1.00	0.5	1.1

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
MAPLE & MAY	End Reading	272.00	282.1
	Start Reading	271.00	282.0
	Hrs Run	1.00	0.1

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Flow Meter
Peach Hill	End Reading	272.1	272.7	272.000
	Start Reading	271.1	272.2	271.147
	Hrs Run	1.0	0.5	0.853

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Hopkock	End Reading	222.1	222.1
	Start Reading	221.0	222.0
	Hrs Run	1.1	0.1

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
NORTON HILL	End Reading	222.1	222.2
	Start Reading	221.0	222.1
	Hrs Run	1.1	0.1

**Van Truck Information**

Days out of the plant working		
This Month	YTD	Remaining
17	28	11

**Fuel Information**

Fuel Cost	Fuel Used	Customer	YTD Customer	Customer
\$158.07	20.9	Customer	YTD Fuel Cost	
\$157.87	21.8	Customer	241.7	Customer
		Customer		
		Customer	YTD Fuel Cost	
<b>This Month Total</b>	<b>\$207.94</b>	<b>179.8</b>	<b>Customer</b>	<b>\$2,944.26</b>

Month Start	Month End	Total	Engine Hours
11/01/04	11/30/04	608.3	607.8
			608.0
			68.2

**Utility Truck Information**

Fuel Cost	Fuel Used	Customer	YTD Customer	
\$74.83	28.18	Customer	YTD Fuel Cost	
\$81.24	29.8	Customer	242.27	
		Customer		
		Customer	YTD Fuel Cost	
<b>November 2004</b>	<b>\$156.07</b>	<b>57.98</b>	<b>Customer</b>	<b>\$2,944.26</b>

**Other tasks and notes**

- 1 11/01 - Unchanged flow chain in plant inspection. Latched-up Flats Mill pumpstation per unit.
- 2 11/02 - Visited and out and checked analysis of Flats Mill pumpstation. Rechecked checkbook on both pumps.
- 3 11/03 - Latching-up was done at Newbrook, Flats Mill and Abbotshay pumpstations. Found a leaky rail on Abbotshay Mill.
- 4 11/04 - Primary cleanings 1 hour.
- 5 11/05 - Checked backlogs of the wild water of the Van Truck.
- 6 11/06 - Rechecked broken rails in the vicinity of Mackinac and Flats Mill pumpstations.
- 7 11/07 - Jailed and removed out chain in front of culvert drop at plant.
- 8 11/08 - Investigated for chain around Western School. Two pumpstations on the grounds has a broken chain.
- 9 11/09 - Located rail in front of Western School. School pump station under base.
- 10 11/10 - Moved Van Truck to busman line north side. worked on the CR 22 sig. Jailer was stuck in a hole in the end of the line.
- 11 11/11 - Checked and re-checked service truck. Checked and removed collection garage.
- 12
- 13
- 14

**NON-CONTRACTUAL WORK PERFORMED**

- 1 11/01 - Crews work for the town on Flattling Road Rd. Checked and rechecked and later on 11/02 to 11/03.
- 2 11/02 - Mackinac High School color contest. Investigated the grounds and found the sewer main to be blocked and fix in one other holes.
- 3 11/03 - Mackinac High School - Crews work and lifting of the roof vent covers has been performed. Also the pumpstation.
- 4 and pump has been both cleaned using the Van Truck.
- 5 11/04 - Checked rail line by Mackinac High School pumpstation and across the millstone. These were ordered then included on 11/05.
- 6 11/05 - Mackinac High School color posters delivered. American flags were called in for service today.



Sent via certified mail #7014 1200 0002 2237 0018 on December 10, 2015

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

December 10, 2015

**Re: November 2015 Reports for Naugatuck, CT WPCF, NPDES # CT0100641**

Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report* for November 2015. The *Nutrients Analysis Report for Compliance with General Permit for Nitrogen Discharges* and the *Discharge Monitoring Report* was 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 November 2015.

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

Sincerely,  
Veolia Water North America – Northeast, LLC

A handwritten signature in black ink, appearing to read "John Batorski", with a horizontal line extending to the right.

John Batorski  
Plant Manager

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

Units	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.	Vol.	% solid	MLSS	SVI	High D.O.	Low D.O.	MLSS	SVI	High D.O.	Low D.O.	% Flow	% Solids	Wk Day	Wk Day	Wk Day	Wk Day	Septic	Indust	Inf.	Prim Final eff.
mgd	mgd	MG	s	wt lbs.	Work Day	Work Day	mg/l	mg/l	Work Day	Work Day	mg/l	mg/l	Work Day	Work Day	lbs	lbs	gal	gal	gal	gal	mg/l	mg/l
Freq	Daily	Daily	Work Day	Work Day	4/ work day	4/ work day	4/ work day	4/ work day	Work Day	Work Day	4/Work Day	4/Work Day	Work Day	Work Day	Wk Day	Wk Day	Wk Day	Wk Day	Wk Day	Wk Day	3/week	3/week
1	5.2	2.1	3.7	0.635			5.0	1.1	287				5.0	1.0	287							
2	4.5	2.1	3.5	0.617	5,994	62	2.0	1.2	283	0.96	7,028	68	1.9	0.9	283	1.11	1,145	148,296			810	190
3	4.5	2.1	3.5	0.654	5,664	65	2.0	1.0	306	1.18	9,756	49	2.1	0.5	306	1.10	3,685	165,408			740	
4	4.6	2.1	3.5	0.636	7,392	54	2.0	1.9	296	0.95	9,404	49	2.0	1.1	296	1.01	4,418	156,528			940	
5	4.3	1.9	3.5	0.619	6,604	61	2.0	0.6	313	0.77	6,196	74	2.1	0.5	313	1.34	5,385	115,843				
6	4.1	2.1	3.4	0.618	7,388	53	2.0	1.0	313	0.95	8,632	52	2.0	0.7	313	1.13	5,308	152,496				
7	4.8	1.9	3.4	0.625			1.9	1.1	295				1.9	0.5	295		5,308	159,828				
8	4.4	1.8	3.4	0.620			4.0	0.8	318				4.2	0.3	318		5,308	170,568				
9	4.3	1.6	3.2	0.622	7,404	49	2.0	0.9	317	1.07	8,216	49	2.2	0.7	317	0.90	5,028	90,844			680	120
10	4.5	1.9	3.5	0.611	6,948	53	2.4	0.5	301	1.14	8,068	48	2.4	0.3	301	1.17	5,895	145,836			1,500	
11	5.2	1.9	3.8	0.620	5,972	60	2.0	0.7	263	0.87	7,688	51	2.0	0.9	263	0.95	4,645	144,768			1,000	
12	4.6	2.1	3.7	0.611	8,740	40	5.0	0.9	255	1.05	8,340	48	5.0	0.7	255	1.61	6,788	108,805				
13	4.4	2.1	3.5	0.617	7,564	48	2.0	0.8	304	0.98	7,600	57	2.1	0.6	304	0.95	4,925	146,328				
14	4.7	2.1	3.5	0.628			2.5	0.5	278				2.4	0.6	278		4,925	173,004				
15	4.5	1.8	3.4	0.622			2.5	0.6	299				2.9	0.8	299		4,925	168,072				
16	5.5	1.7	3.5	0.621	5,512	60	2.2	0.8	324	0.98	6,440	57	2.2	0.5	324	0.92	3,233	55,562			220	150
17	4.5	1.6	3.4	0.629	6,412	56	3.6	0.8	289	0.94	6,723	59	4.1	0.6	289	1.05	3,386	163,680			120	
18	4.5	2.1	3.6	0.638	5,420	59	2.1	0.8	298	0.95	7,760	52	2.1	0.9	298	1.03	3,369	160,488			120	
19	6.7	1.7	3.7	0.636	5,296	53	2.2	0.7	243	0.98	6,432	61	1.9	0.8	243	1.02	3,403	144,108				
20	6.7	3.1	4.5	0.625	3,620	58	2.1	0.9	226	1.11	6,352	57	2.1	1.0	226	1.19	1,957	131,868				
21	5.3	2.6	3.9	0.656			2.2	0.9	254				2.2	0.7	254		0	151,008				
22	5.5	2.3	3.9	0.660			2.2	0.8	263				2.1	0.2	263		0	147,072			170	100
23	4.9	1.9	3.8	0.659	5,924	68	2.6	1.0	258	1.00	6,348	74	2.0	0.5	258	0.97	1,676	47,953			150	
24	4.5	2.1	3.7	0.644	5,884	71	5.0	0.5	270	0.99	7,476	70	2.2	0.5	270	1.05	1,735	111,455			140	
25	4.8	2.1	3.8	0.655	6,856	55	2.1	0.7	252	1.08	7,140	73	5.0	1.0	252	1.05	2,718	170,568				
26	5.8	2.1	3.7	0.651			4.2	0.1	299				5.0	0.3	299		2,718	163,116				
27	4.4	2.1	3.5	0.657			2.9	0.0	286				2.5	0.3	286		2,718	180,900				
28	5.0	2.3	3.7	0.655			2.1	0.9	291				1.9	0.7	291		2,718	214,452				
29	4.6	2.1	3.5	0.679			2.1	1.0	281				2.0	0.6	281		2,718	185,772				
30	4.6	1.9	3.5	0.637	6,400	61	5.0	0.7	318	0.97	7,836	59	5.0	0.7	318	1.03	3,403	131,412			140	
Total	145.9	61.3	107.99														106,527	4,374,879				
Ave.	4.9	2.0	3.60	0.635	6,367	57	2.7	0.8	286	1.04	7,549	58	2.8	0.6	1.00	1.08	3,551	145,829			518	140





Units	Zinc		Alkalinity	
	Inf.	Eff.	Pri. Eff.	Eff.
kg/day				mg/l
Weekly				Monthly
1				
2	7.39	0.738	120	50
3			130	50
4			130	40
5			150	40
6			130	40
7				
8				
9	6.30	1.108	80	40
10			130	40
11			120	50
12			140	40
13			130	40
14				
15				
16	5.76	1.050	140	40
17			140	50
18			140	50
19			120	60
20			130	50
21				
22	2.25	1.206		
23			110	30
24			140	30
25			130	40
26				
27				
28				
29				
30			90	40
Total				
Ave.	5.43	1.025	126	43

Sludge Disposal Location:

Please return forms to:

DEEP - Water Bureau

ATTN: Municipal Wastewater Monitoring Coordinator

Municipal Facilities

79 Elm Street

Statement of Acknowledgement

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

Authorized Official:

John Batorski

Title:

Plant Manager

Signature:



Date:

12-10-15

**November 2015 Sludge Data**

<b>Source</b>	<b>Gallons</b>	<b>Wet Tons</b>
Americas Styrenics	11,300	
Beacon Falls	110,500	
Bedford Hills	26,000	
Bristol		457.06
Casella - Chicopee Cake		507.48
Casella - Glen Cove		280.41
Casella - Huntington		379.05
Casella - Poughkeepsie		233.98
Casella - Suffolk		1338.68
Casella - Walden		14.25
Casella - Yorktown		72.93
Danbury Cake		45.18
Heritage Village Water	26,000	
Litchfield	52,000	
Lynn, MA		64.86
Lynwood Place	32,500	
Mahopac Sludge & Septic	544,000	
New Hartford	32,500	
New London	13,000	
New Rochelle		609.88
North Canaan	26,000	
North Haven	97,500	
Pawling	117,000	
Pepsi	6,500	
Plymouth	84,500	
Poughkeepsie	409,500	
Rhinebeck WPCF		29.08
Seymour Cake		104.32
Southbury	110,500	
Southbury Car Care	6,500	
Southington	624,000	
Stratford	838,500	
Synagro - Ansonia	110,500	
Synagro - Branford	104,000	
Synagro - Bridgeport East	52,000	
Synagro - Bridgeport West	247,000	
Synagro - East Windsor	19,500	
Synagro - Groton	6,500	
Synagro - New Canaan	91,000	
Synagro - Newtown	6,500	
Synagro - Norwalk	52,000	
Synagro - Pawcatuck	13,000	
Synagro - Ridgefield	26,000	
Synagro - Stamford		21.14
Thomaston Treatment	52,000	
Torrington	357,500	
Westport	75,311	
Windham	325,000	
<b>Totals</b>	<b>4,706,111</b>	<b>4158.3</b>



DMR Copy of Record

Permit: CTO100641  
 Permit #: Yes  
 Major: 001 External Outfall  
 Permitted Feature: From 11/07/15 to 11/30/15  
 Report Dates & Status: Monitoring Period: Considerations for Form Completion

Permittee: NAUGATUCK WPCF  
 Permittee Address: 500 CHERRY STREET  
 NAUGATUCK, CT 06770  
 Discharge: 001-1 SANITARY SEWAGE  
 DMR Due Date: 12/15/15

Facility: NAUGATUCK, BOROUGH OF  
 Facility Location: 500 CHERRY STREET  
 NAUGATUCK, CT 06770  
 Status: NetDMR Validated

Principal Executive Officer  
 First Name: John  
 Last Name: Batoraki  
 No Data Indicator (NDDI)  
 Form NDDI:

Title: Plant Manager  
 Telephone: 203-723-1433

Sample Code	Parameter Name	Monitoring Location	Season	Param. NDDI	Quantity or Loading			Quality or Concentration			Unit	Frequency of Analysis	Sample Type
					Value 1	Qualifier 1	Value 2	Qualifier 2	Value 3	Qualifier 3			
00011	Temperature, water temp. (ahrenheit)	W - See Comments	0	-									
00050	Flow rate	1 - Effluent Gross	0	-	3.6	Req Mon MO AVG	6.7	Req Mon DAILY MX	0.3 - MOD	15 - deg F	0100 - Once Every 2 Months	GR - CRAB	
00030	Oxygen, dissolved [DO]	1 - Effluent Gross	0	-						19 - mg/L	0101 - Daily	GR - CRAB	
00010	BOD, 5-day, 20 deg. C	T - See Comments	1	-						19 - mg/L	0101 - Daily	GR - CRAB	
00020	pH	1 - Effluent Gross	0	-						19 - mg/L	0101 - Daily	GR - CRAB	
00030	pH	S - See Comments	0	-						19 - mg/L	0100 - Quarterly	CP - COMPOS	
00040	pH	W - See Comments	0	-						19 - mg/L	0100 - Quarterly	CP - COMPOS	
00050	Solids, total suspended	1 - Effluent Gross	0	-						19 - mg/L	0307 - Three Per Week	CP - COMPOS	
00030	Solids, total suspended	Q - Raw Sewage Influent	0	-						19 - mg/L	0307 - Three Per Week	CP - COMPOS	

Sent electronically 12-9-15  
 J.S. [Signature]





01087 Nickel, total [as Ni]	Q - Raw Sewage Influent	0	Req Mon DAILY 01 - lg/d	01 - lg/d	Req Mon DAILY MX	0107 - Weekly	CP - COMPOS
01087 Nickel, total [as Ni]	T - See Comments	1				0100 - Quarterly	CP - COMPOS
01087 Nickel, total [as Ni]	W - See Comments	0				0100 - Once Every 2 Months	GR - GRAB
01077 Silver, total [as Ag]	T - See Comments	1				0100 - Quarterly	CP - COMPOS
01092 Zinc, total [as Zn]	1 - Effluent Cross	0	1.025	1.200	Opt Mon DAILY MX	0107 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	Q - Raw Sewage Influent	0	3.79 MO AVO	3.00 DAILY MX	9 - Conditional Monitoring - Not Required This Period	0107 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	T - See Comments	1				0107 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	W - See Comments	0				0107 - Once Every 2 Months	GR - GRAB
01097 Arsenic, total [as As]	T - See Comments	1				0100 - Quarterly	CP - COMPOS
01105 Aluminum, total [as Al]	T - See Comments	1				0100 - Once Every 2 Months	GR - GRAB
01105 Aluminum, total [as Al]	W - See Comments	0				0100 - Once Every 2 Months	GR - GRAB
01147 Selenium, total [as Se]	1 - Effluent Cross	0	0.04	0.04	Opt Mon DAILY MX	0107 - Weekly	CP - COMPOS
01147 Selenium, total [as Se]	Q - Raw Sewage Influent	0	35 MO AVG	75 DAILY MX	9 - Conditional Monitoring - Not Required This Period	0107 - Weekly	CP - COMPOS
01147 Selenium, total [as Se]	S - See Comments	0				0100 - Once Every 2 Months	GR - GRAB
01147 Selenium, total [as Se]	T - See Comments	1				0100 - Once Every 2 Months	GR - GRAB

Opt Mon DAILY MX  
 9 - Conditional Monitoring - Not Required This Period  
 Req Mon INST MAX  
 7  
 Req Mon INST MAX





## **Naugatuck WWTP – Collections System**

### **Vacuum Truck Refurbishment/Replacement**

To estimate the approximate cost of a total vehicle refurbishment, Veolia contacted Bahr Sales Inc. and Digennaro Services, LLC. Each company assessed and inspected different parts of the truck that were crucial to operation. Bahr Sales estimates that it will cost \$15,000 to \$18,000 to rebuild or replace the parts of the truck responsible mainly for hydraulic function. An included email gives a list of these parts. Digennaro Services estimates just under \$60,000 to refurbish the more common parts of the truck such as the engine, starter, radiator, exhaust system, brakes and transmission. This price includes labor. A breakdown of this price is included.

In addition, thickness measurements indicate wear on the vacuum portion of the truck. An elbow was recently replaced as was the blower and cyclone. The blower exhaust shows significant signs of reduced thickness. Thickness measurements ranged from 0.07 to 0.120 inches. The normal thickness of this portion was most likely 0.1875 inches. The tank portion of the truck is made of two layers of different types of steel. Thickness measurements on this part would be difficult. However, from the attached pictures of the condition of the inside of the tank, this will soon need replacement as well. To replace these parts would be at least an additional \$10,000. This results in a total upwards of \$90,000 to completely refurbish the existing truck.

The frame has had two repairs. The original manufacturer, Sterling, is no longer in business. While some parts are expected to be available for the near future, this may not be the case in years to come as the truck ages. The vehicle has over 191,000 miles on it and the engine has over 6000 hours. A rental unit will cost at minimum \$10,000 per month should the truck face an unanticipated repair.

The other option would be to buy a new truck. Included in this report is a next to new unit for sale that was found online. The price of this 2014 truck is most likely lower than what it would be to buy a completely new unit for Naugatuck. Most vac trucks are custom built to accommodate for the variety of collections systems that they handle. There would be certain parts of a new truck that Naugatuck would have to have custom built or special ordered. This would be the reason for a total of around \$400,000 to buy a brand new truck.

# DIGENNARO SERVICE, LLC

107 AMITY ROAD  
BETHANY, CT 06524  
(203)393-1524

Estimate #0004375  
Date Printed : 12/8/15  
Page : 1  
Center :

<b>Customer :</b> VEOLIA WATER NORTH AMERICA <b>Address :</b> 125 S. 84TH STREET SUITE 175 <b>City :</b> MILWAUKEE, WI 53214- <b>Phone 1 :</b> ( 203 ) 509-6012 <b>Ext :</b> mike <b>Phone 2 :</b> ( 203 ) 509-6011 <b>Ext :</b> colt	<b>VEHICLE :</b> 2001 FORD STERLING <b>TRK # :</b> 70NA <b>TRL# :</b> <b>VIN# :</b> 2FZHAZAS72AK96102 <b>ENGINE :</b> <b>LOC# :</b> <b>MILEAGE :</b> 188707
---	---

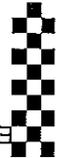
Parts				Labor				
Quan	Part Number	Description	Price	Op	Tech	Description	Time	Charge
1.00		RADATOR KIT	1895.00	AA00	00	REPLACE RADIATOR AND PIPING WITH NEW MOUNT RUBBERS		760.00
1.00		REMAN ENGINE	21000.0					
1.00		STARTER	685.23	ENGO	00	REPLACE ENGINE WITH CAT REMAN R&R AND DRESS ENGINE INCLUDE NEW CLUTCH REFACE FLYWHEEL, ALT AND STARTER		3800.00
1.00		ALT	255.00					
1.00		CLUTCH	932.00					
1.00		OIL AND COOLANT	195.00	AAU0	00	REPLACE TRANNY INCLUDE DRESS		285.00
1.00		REMAN TRANNY	3986.23	BBA0	00	REBUILD FRONT END KING PINS AND BRAKES		1425.00
1.00		KING PIN SET	235.00	AAR0	00	REBUSH REAR SUSPENSION INCLUDE PARTS		4200.00
2.00		SHOE KIT	172.64	BBA0	00	REPLACE REAR DIVE CHUCKS		1140.00
2.00		SEALS	72.46	AAD0	00	REAR BRAKES		1520.00
2.00		DRUMS	552.00	AA00	00	EXHAUST SYSTEM		665.00
1.00		CAM KIT	18.00	ELC0	00	PRICE DOSE NOT INCLUDE PTO REBUILD WOOD BE PARTS AND TIME , LIGHTING , BODY WORK		0.00
1.00		1ST DRIVE	3200.00					
1.00		2ND DRIVE	1890.00					
4.00		DRUMS	448.00					
4.00		SHOE KIT	261.00					
4.00		SEALS	232.00					
2.00		CAM KIT	54.00					
1.00		EXHAUST SYSTEM	1800.00					

OK Bad	Recomendation	OK Bad	Recomendation	OK Bad	Recomendation

I hereby authorize the repair work to be done along with the necessary parts and materials and hereby grant you and/or your employees permission to operate the vehicle herein described on streets, highways or elsewhere, at your discretion, for the purpose of testing and/or inspection. An express mechanics lien is hereby acknowledged on the above vehicle to secure the amount of repairs thereto. I understand that dealer/owner is not responsible for delay or other consequence due to the unavailability of parts shipments beyond their control. NOT RESPONSIBLE FOR DAMAGE OR ARTICLES LEFT IN CAR IN CASE OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND OUR CONTROL.

Labor :	\$13,795.00
Parts :	\$39,353.56
Sublet :	\$0.00
Other Fees :	\$0.00
SUPPLY FEE:	\$70.00
Subtotal :	\$53,218.56
Sales Tax :	\$3,379.38
Total :	\$56,597.94
<b>Estimate Only</b>	

x \_\_\_\_\_



# DIGENNARO SERVICE, LLC

107 AMITY ROAD  
 BETHANY, CT 06524  
 (203)393-1524

Estimate #0004375  
 Date Printed : 12/8/15  
 Page : 2  
 Center :

Customer : VEOLIA WATER NORTH AMERICA Address : 125 S. 84TH STREET SUITE 175 City : MILWAUKEE, WI 53214- Phone 1 : ( 203 ) 509-6012      Ext : mike Phone 2 : ( 203 ) 509-6011      Ext : colt	VEHICLE : 2001 FORD STERLING TRK # : 70NA      TRL# : VIN# : 2FZHAZAS72AK96102 ENGINE :      LOC# : MILEAGE : 188707
--	--

Parts				Labor				
Quan	Part Number	Description	Price	Op	Tech	Description	Time	Charge
2.00		FRT SPRING KIT	1470.00					

OK Bad	Recommendation	OK Bad	Recommendation	OK Bad	Recommendation
--------	----------------	--------	----------------	--------	----------------

I hereby authorize the repair work to be done along with the necessary parts and materials and hereby grant you and/or your employees permission to operate the vehicle herein described on streets, highways or elsewhere, at your discretion, for the purpose of testing and/or inspection. An express mechanics lien is hereby acknowledged on the above vehicle to secure the amount of repairs thereto. I understand that dealer/owner is not responsible for delay or other consequence due to the unavailability of parts shipments beyond their control. NOT RESPONSIBLE FOR DAMAGE OR ARTICLES LEFT IN CAR IN CASE OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND OUR CONTROL.

X \_\_\_\_\_

Labor :	\$13,795.00
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SUPPLY FEE:	\$70.00
Subtotal :	\$53,218.56
Sales Tax :	\$3,379.38
Total :	\$56,597.94
<b>Estimate Only</b>	

To: "Bahr Sales, Inc." <bahrsales@aol.com>

Thanks Bill, that is fine. I will have our collections crew bring it. Will Monday morning work? Probably around 8am.

[Quoted text hidden]

---

**Bahr Sales, Inc.** <bahrsales@aol.com>  
To: "Verlezza, Natalie" <natalie.verlezza@veolia.com>

21 October 2015 at 15:58

Natalie,

After looking at your unit we estimate it would cost about 15,000.00 - 18,000.00 to rebuild water pump, replace pd blower silencer assembly, replace dump body hinge pins, replace disconnect boots and realign, rebuild or replace pressure relief valve, replace blower temp gauge and sending unit, replace boom hose, as discussed with your operator.

Let us know if you have any questions.

Thank you,

Bill Bahr  
BAHR SALES, INC.  
1185 South Broad Street  
Wallingford, CT 06492  
203-265-6711  
203-269-5323 fax  
203-623-5284 cell

---

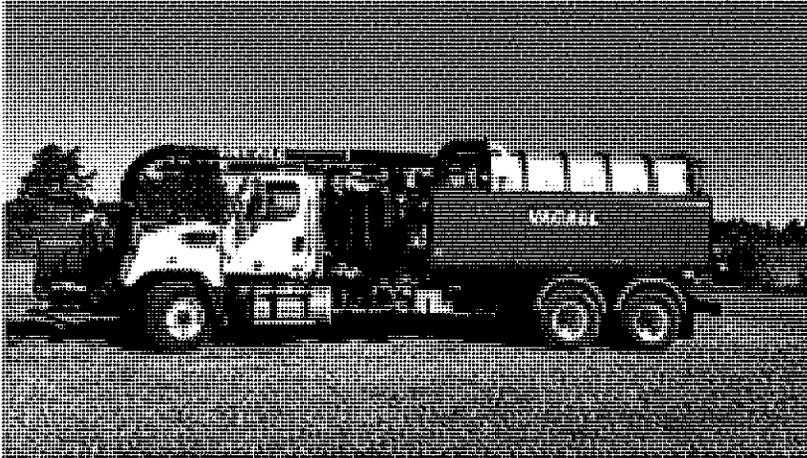
From: natalie.verlezza@veolia.com  
Date: Thu, 8 Oct 2015 15:09:05 -0400  
Subject: Re: Vac Truck Refurbishment  
[Quoted text hidden]

## Great Lakes Equipment Sales, Inc.

4818 W. 137th Street Unit B  
Crestwood, Illinois 60445

Call Us: (888) 432-9070

### 2014 VACALL AJV 1215 COMBINATION SEWER CLEANER TRUCK — **SELLING PRICE - \$330,600.00**



#### INFO

*Lease for \$6,000.00 per month for 60-months, Dealer Demo Truck*  
Stock Number GL716

*Lease for \$6,000.00 per month for 60-months, Dealer Demo Truck*

#### 2014 Freightliner 114SD Chassis

5,714 Miles  
Detroit DD-13 410HP Diesel  
Allison 4000 RDS 6-Speed Automatic Transmission  
20,000# Fronts and 46,000# Rear Axles  
66,000 GVW

#### VACALL AJV 1215 Combination Sewer Cleaner Truck

12-Yard Debris Body  
1500 Gallon Water Capacity  
Roots Dresser 824 4100 CFM @ 16" Hg. Blower  
85 GPM @ 2000 PSI Water Pump  
Passenger Side Self Winding Handgun Reel with 50' x 1/2" Hose and Handgun (800 PSI @ 20 GPM)  
Debris Body Flush Out System  
4" Hydraulic 710 GPM Sludge Pump System  
Hydro-Excavation System  
Air Purge System  
Cold Weather Recirculation System  
8" Hydraulic Vacuum Boom with 180 Degree Rotation  
Wireless Remote Control  
Remote Grease Manifold  
Tank Hoist with Opening Rear Door  
Rear Mount Directional Arrow Board  
Beacon Lights  
Toolboxes/Enclosure Storage  
(1) Lockable Aluminum Toolbox (18" x 18" x 36")  
Side and Rear Tube Racks  
Front Mount Hose Reel with 600' of 2500 PSI Sewer Cleaning Hose  
(1) 1" x 10' Black Leader Hose  
(2) 8" x 7' Bandlock Aluminum Tubes  
(1) Fill Hose 25' x 2-1/2"  
(1) Travis Clamp  
(1) Hydrant Wrench  
(1) 18-Degree Jetter Nozzle  
(1) 30-Degree Jetter Nozzle  
(1) Tiger Tail Guide  
(1) Pendant Remote Control  
Small Nozzle Skid 3-7/8" x 15" Long  
24' x 8" Bandlock Type Aluminum Vacuum Tubers

**Sewer Cleaner Truck for Sale in Maryland, New Factory Warranty, Financing and Leasing Available, Call 888-432-9070 for more Information.**

Prices do not include FET if applicable, sales tax, title, registration, and doc fee. While every reasonable effort is made to ensure the accuracy of this information, we are not responsible for any errors or omissions contained on these pages. Please verify any information in question.

#### PHOTOS



Sent via Certified R.R.R. Mail 7014 1200 0002 2236 9890 on December 2, 2015

December 2, 2015

Connecticut Department of Environmental Protection  
Bureau of Air Management  
ATTN: Mr. John Degirolamo  
Compliance Analysis & Coordination Unit  
79 Elm Street  
Hartford, CT 06106-5127

Subject: Cylinder Gas and Opacity Audit Fourth Quarter 2015

Dear Mr. Degirolamo:

Enclosed you will find copies of the above referenced reports. There were no exceptions to the attached reports.

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

Sincerely,

Veolia Water North America-Northeast, LLC

A handwritten signature in cursive script that reads "John Batorski".

John Batorski  
Project Manager

cc: James Stewart, James R. Stewart PE, LS, Director of Public Works.  
(Enclosures)



# **Test Report – CEMS Cylinder Gas & Opacity Audit Fourth Quarter 2015**

**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. 4861

November 30, 2015

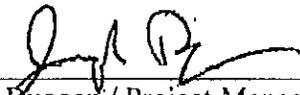
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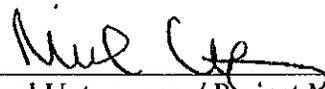
CK Environmental, Inc.  
1020 Turnpike St., Suite 8  
Canton, MA 02021 USA  
*Toll-free:* 888-CKE-0303  
*International:* 781-828-5200  
*Fax:* 781-828-5380  
[www.ckenvironmental.com](http://www.ckenvironmental.com)



## 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.

Prepared by:   
Joseph Duggan / Project Manager

Reviewed by:   
Michael Unterweger / Project Manager



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- 1.2 Key Personnel

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- 2.2 Continuous Emissions Monitoring System

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- 3.2 Field Test Changes
- 3.3 Presentation of Results

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- 4.1 Cylinder Gas Audit
- 4.2 Opacity Audit Procedure

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- 5.2 Reporting

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Appendix C	Opacity Filter & Calibration Gas Certificates



## **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](mailto: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](mailto:munterweger@cke.us)

Test Personnel: Mr. Robert Ciriello / Project Technician

Unit Tested: Sludge Incinerator Exhaust Stack

Test Date: November 20, 2015



## 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 November 20, 2015.

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 and 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



## **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 (O<sub>2</sub>) 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
O <sub>2</sub> , Dry	Siemens	Oxymat 6E	7MB20211 EA000AA 1	0-25%
CO	Thermo Environmental	48i	1405660903	0-300 ppmvd
Opacity	Land	4500 Mark III	0095478	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.



## 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 ( $\approx$  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.



## **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.



## **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.



## **TABLES**

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**Table 3.1 Summary of Results**  
**Cylinder Gas Audit**  
**FB Incinerator**  
**Veolia Water NA - Naugatuck, CT**  
**Naugatuck, Connecticut**  
**4th Qtr - 2015**



CEMS	Test Date	Monitor	Span / Units	Cylinder Gas Audit				CGA Criteria
				Standard Conc.	Average Response	Error (% of std conc.)	Error (abs. diff.)	
Oxygen	11/20/15	Siemens	0-25%	5.01	4.80	4.19	0.21	15.0% or 0.5% O <sub>2</sub>
				10.00	9.60	4.00	0.40	15.0% or 0.5% O <sub>2</sub>
Carbon Monoxide	11/20/15	TECO	0-300 ppm	75.00	75.80	1.07	0.80	15.0% or 5 ppm
				167.80	165.90	1.13	1.90	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: 11/20/15  
AUDITOR: Robert Griello

Corrected Filter Values (2)

Run #	Zero	Low	Mid	High	Actual Filter Values	Corrected Filter Values (2)
Pre Zero	0.31				1.000	N/A
1		9.39	20.13	32.58		
2		9.39	20.13	32.59	9.74	9.74
3		9.42	20.16	32.61		
4		9.42	20.16	32.61	19.96	19.96
5		9.45	20.13	32.58		
6 Min Avg		9.47	20.09	32.58		
Post Zero	0.31				31.97	31.97

PATH LENGTH CORRECTION FACTOR (PLCF) =  
LOW CALIBRATION FILTER VALUE =  
MID CALIBRATION FILTER VALUE =  
HIGH CALIBRATION FILTER VALUE =

N	Low	Value	Delta L	Del L^2	Mid	Value	Delta L	Del L^2	N	High	Value	Delta L	Del L^2
1	9.4	9.7	0.4	0.1	20.1	20.0	0.2	0.0	1	32.6	32.0	0.6	0.4
2	9.4	9.7	-0.4	0.1	20.1	20.0	0.2	0.0	2	32.6	32.0	0.6	0.4
3	9.4	9.7	-0.3	0.1	20.2	20.0	0.2	0.0	3	32.6	32.0	0.6	0.4
4	9.4	9.7	-0.3	0.1	20.2	20.0	0.2	0.0	4	32.6	32.0	0.6	0.4
5	9.5	9.7	-0.3	0.1	20.1	20.0	0.2	0.0	5	32.6	32.0	0.6	0.4
Sum =			-0.9	0.6			0.9	0.2	Sum =			3.1	1.9
A = Sum (Delta L)^2 =			0.8				0.8		A = Sum (Delta L)^2 =			9.7	
B = Sum (Delta L^2) =			0.6				0.2		B = Sum (Delta L^2) =			1.9	
N =			5.0				5.0		N =			5.0	
(N * B) - A =			1.9				0.0		(N * B) - A =			0.0	

Mean Error (ME) = (Sum Delta L / N)	ME =	-0.2	0.2	0.6
Confidence Interval (CI) = SQRT((N*B)-A)*0.2776	Confidence Interval (CI) =	0.4	0.0	0.0
Calibration Error = ABS (ME) + CI	Calibration Error =	0.6	0.2	0.6
6 Minute Average Mean Error =	6 Minute Average Mean Error =	0.3	0.1	0.6

(1) - Calculated per 40 CFR 60 Appendix F Procedure 3 (CE ≤ 3.0)  
(2) - Corrected Filter Value = 1-(1-Actual Filter Value)<sup>PLCF</sup>

where the actual filter value = (Labeled % opacity / 100)



Sent via certified mail #7014 1200 0002 2236 9883 on November 23, 2015

Connecticut Department of Energy and Environmental Protection  
Bureau of Water Protection and Land Use  
Planning and Standards Division-Municipal Facilities Section  
Attn: Bypass Coordinator  
79 Elm Street  
Hartford, CT 06106-5127

November 23, 2015

**Re: Bypass Agreement**

Dear Sir/Madam:

Enclosed please find a signed copy of the *Authorized Bypass Reporter Agreement* for the Naugatuck WPCF.

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

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)

## ***Authorized Bypass Reporter Agreement***

### **A. Signatory Authorization**

[PERMITTEE NAME: Naugatuck, CT

SIGNATORY AUTHORITY NAME: John Batorski (authorized by Naugatuck WPCA at Nov. 19<sup>th</sup>, 2015 WPCA meeting).

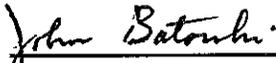
Permittee Name:	Naugatuck, CT
Signatory Authority Name:	John Batorski
Phone Number:	203-723-1433 ext. 2015
Email Address	John.Batorski@Veolia.com

The Signatory Authority is the appropriate *individual* identified under RCSA Sections 22a-430-3(b)(2)(A) with the authority to sign Electronic Filings on behalf of the Permittee for the purposes of reporting bypass information to local, state and federal authorities as required.

I, John Batorski, have the authority to enter into this Agreement for Naugatuck under the applicable standards. I request the Connecticut DEEP grant me [and the following individual(s)] the ability to report sewer bypasses:

List name(s) of Authorized Bypass Reporter(s) here: Chris Makuch, Mike Forish, Brian Howard, Natalie Verlezza

In signing this Agreement, I am bound by the terms of this Agreement, and Naugatuck is/are also bound by this Agreement.



\_\_\_\_\_  
Signatory Authority Signature

**John Batorski**

Signatory Printed Name

**Plant Manager**

Title

**November 23, 2015**

Date

**B. Authorized Bypass Reporter Signature** (complete for each person who will report sewer bypasses)

Permittee Name:	Naugatuck WPCF
NPDES Number (applicable if reporting bypasses at treatment plant):	CT0100641
Authorized Bypass Reporter Name:	John Batorski, Chris Makuch, Mike Forish, Brian Howard, Natalie Verlezza
Email Address:	John.Batorski@Veolia.com, Chris.Makuch@veolia.com,Natalie.Verlezza@veolia.com
Phone Number:	203-723-1433
User Name:	Naugatuck Bypass

The Authorized Bypass Reporter is either the Signatory Authority named in Section A of this Agreement, or an individual duly authorized to submit Electronic Filings by the Signatory Authority pursuant to the appropriate standards and regulations (e.g., RCSA §§ 22a-430-3(b)(2)(B)).

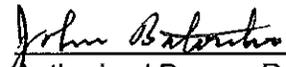
**SIGN ONLY ONE OF THE FOLLOWING STATEMENTS:**

I, [Bypass Reporter], have the authority to enter into this Agreement for [City/Town] under the applicable standards. [Sign here if you are an elected official who signed Section A, and you will be also be reporting bypasses.]

**OR**

I, John Batorski, am authorized by the Signatory Authority named in Section A of this document, who does have the authority under the applicable standards, to enter into this Agreement for Naugatuck, CT. [Sign here if you are duly authorized by an elected official to report sewer bypasses.]

By submitting this Agreement to the Connecticut DEEP I, John Batorski have read, understand, and accept the terms and conditions of this Authorized Bypass Reporter Agreement. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Agreement and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the Agreement, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

  
 \_\_\_\_\_  
 Authorized Bypass Reporter Signature

John Batorski  
 Authorized Bypass Reporter Printed Name

Plant Manager  
 Title

Nov. 23, 2015  
 Date



TO: Municipal Superintendents, Public Works Departments, and WPCAs

FROM: Stacy Pappano, Sanitary Engineer 3  
Municipal Water Pollution Control Facilities  
Planning and Standards Division

DATE: November 6, 2015

RE: Flood Response Survey

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The Department is assembling data regarding past experiences with storm and flood events, the status of flood response plans, and relevant structure and function in municipal wastewater treatment plants and pump stations in Connecticut. This data will be used to help advise teams in responding to flooding or other emergency events.

To accomplish this, we need your assistance in determining the state of wastewater facilities in your sewerage system. Facilities include your treatment plant site (or sites, if there is more than one location at which utility service enters the site) and major pump stations. Please provide the requested information by accessing the Flood Response Survey at:

**[https://uconn.co1.qualtrics.com/SE/?SID=SV\\_6RkSJprzpEnMavb](https://uconn.co1.qualtrics.com/SE/?SID=SV_6RkSJprzpEnMavb)**

This survey asks both general questions about your facilities and experience with storm and flood events as well as more detailed questions about individual wastewater system components (e.g., elevation, GPS coordinates, etc.). Should another person from your organization need to assist you in completing the survey, please first complete as much information as you can. Then, when you reach the end of the survey, forward the survey link provided at the end of the survey to the next person in your organization to complete the remainder of the survey.

The survey is expected to take 10 to 15 minutes to complete for smaller wastewater systems and 20 to 30 minutes for larger wastewater systems.

The following is some guidance on what we are looking for when you complete the online survey.

Introduction	Provide your name and the facility name. Please identify the street address, contact phone numbers and email address. Please also mark if what type(s) of wastewater facilities you manage (e.g., WPCF only, Collection System only, WPCF and Collection System).
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Contact Information	Please provide contact information for each facility you manage including the contact person for normal weekday and weekend hours and emergencies including the appropriate Emergency Operations Contact (EOC). For the EOC, please provide the name, title, mobile phone number and email for the person who would correspond with the State EOC during an emergency.
Emergency Action Plan	If you have an emergency action plan, please provide the date of the last update.
Past storms and floods, responses, and concerns	Please respond to these questions regarding impacts past storm events, responses and resilience approaches, and concerns about the future.
WPCF(s)	Please provide the name, address, and GPS location for your WPCF. This information will assist the utilities' and the DEEP in locating a critical facility during and after an emergency. Other questions concern the flood elevation of the site, flood protection measures, datum used, outfall location, critical structures, and generators. Provide the name of each critical structure (excluding pump stations at your WPCF) at the WPCF as well as the flood elevation and a description of what the flood elevation represents. Also provide specifics about each generator at the WPCF (e.g., fuel source, condition, size, etc.).
Pump Stations	Please provide information for all pump stations under your control including the name, address, and GPS location for your WPCF. This information will assist the utilities' and the DEEP in locating a critical facility during and after an emergency. Other questions concern the flood elevation of the site, datum used, operation and monitoring information, and generators. For each generator, provide specifics including fuel source, condition, size, etc. Please answer these short answer questions in a concise, but thorough, manner. It is important that this information is clear in case of a flooding emergency.
Collection System	Provide contact information including the contact person for normal weekday and weekend hours and emergencies.
End of Survey	The URL provided at the end of the survey is unique to your system. Should you need to save your responses and return to the survey at a later date or if another person in your organization needs to complete a portion of the survey, use the link provided here to return and complete unanswered survey questions.

Please complete the online survey by Wednesday, December 15, 2015.

If you have any questions, please contact me at [stacy.pappano@ct.gov](mailto:stacy.pappano@ct.gov) or at 860) 424-3362.

Thank you in advance for your continued assistance.

### STORM RESPONSE SURVEY

The following is a survey for the Department of Energy and Environmental Protection (DEEP) to assemble data regarding past experiences with storm and flood events, the status of flood response plans, and relevant structure and function in municipal wastewater treatment plants and pump stations in Connecticut.

This survey asks both general questions about your facilities and experience with storm and flood events as well as more detailed questions about individual wastewater system components (e.g., elevation, GPS coordinates, etc.). Should another person from your organization need to assist in completing the survey, please complete as much information as you can first. Then, when you reach the end of the survey and have saved your responses (make sure you receive the “your responses have been submitted message”), forward the survey link provided at the end of the survey to the next person in your organization to complete the remainder of the survey. Note, each time you submit responses and generate a survey link, you must send the link you generate at that time to the next person in your organization.

Q3. Please provide the following information:

Your name (Last name, First name)	Batorski, John
Facility Name	Naugatuck WPCF
Facility Address (Number and street)	500 Cherry Street
City, State	Naugatuck, CT
Zipcode	06770
Your mobile phone number	203-509-6010
Main facility phone number	203-723-1433
Main facility fax number	203-723-8539
Your email address	John.Batorski@Veolia.com

Q4. Please mark the type(s) of critical facility that you manage in your system:

- WPCF only  
 Collection System only (conveyance and pump stations)  
 WPCF and Collection System

Q5. How many WPCF(s) do you maintain? 1

Q6. Are you the contact person for your WPCF during normal weekday hours?  Yes  No

Q7. Who is the appropriate contact person for your WPCF during normal weekday hours?

Name (Last name, First name)	Forish, Mike
Telephone number	203-509-6012
Mobile phone number	203-509-6012

Q8. Are you the contact person for your WPCF during weekend hours?  Yes  No

Q9. Who is the appropriate contact person for your WPCF during weekend hours?

Name (Last name, First name)	Forish, Mike
Telephone number	203-509-6012
Mobile phone number	203-509-6012

Q10. Are you the contact person for your WPCF during emergencies?  Yes  No

Q11. Who is the appropriate Emergency Operations Contact?

Name (Last name, First name)	Forish, Mike
Title	Collections - Lead
Mobile Phone number	203-509-6012
Email	natalie.verlezza@veolia.com

Q12. Do you have an emergency action plan?  Yes  No

Q13. Please provide the date of the last emergency action plan update: 10/08/2015

**This section concerns past storm and flood events, responses to those events and concerns about future events.**

Q15. Have past severe storms caused any issues for your wastewater system (WPCF and/or collection system including pump stations)?  Yes  No

	Yes	No	Not relevant
Q16. Have you dealt with flooding as a result of past severe storms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q17. Did the flooding cause you to lose access to one or more of your wastewater facilities (e.g., WPCF or pump stations)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q18. Have you lost power to your WPCF(s) or pump station(s) as a result of past severe storms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q19. Have you bypassed or had other treatment plant issues as a result of past severe storms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q20. Have you made changes to improve the resilience of your wastewater system as a result of past severe storms? Changes could include such actions as undertaking vulnerability assessments, elevating electrical panels, installing backup generators, undertaking planning, changing policies, etc.

Yes  No

Q21. The following statements characterize resilience approaches. Please mark how well each statement reflects your approach to improving resilience of your wastewater system.

	Mostly does NOT reflect our approach	Reflects our approach a little bit	Mostly reflects our approach
To improve resilience, we considered the impact of past storms as well as the impact of potentially more severe storms in the future	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
To improve resilience, we considered making changes to both wastewater and other infrastructure systems (e.g., power, transportation)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
To improve resilience, we considered hard (changes to infrastructure) and soft (e.g., planning, policy) approaches	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
While we have made changes to improve resilience, resilience is an ongoing effort	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Q22. For each statement below, please indicate the extent to which the item helped you in your efforts to make changes to your wastewater system:

	Not at all helpful	Somewhat helpful	Very helpful	Not applicable
Experiencing impacts from past storms	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Available budget	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local or regional policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State or federal policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aging infrastructure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local political support	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Municipal partners	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having up-to-date technology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public support	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being empowered to make changes to the wastewater system	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organizational leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Incentives to learn about resilient wastewater systems	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sound science about how future climate extremes may impact our region	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sound science about how future climate extremes may impact our wastewater system	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A trusted information source to provide guidance about how to adapt to future climate extremes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q23. For each statement below, please indicate the extent to which the item hindered you in your efforts to make changes to your wastewater system:

	Not at all hindered	Somewhat hindered	Greatly hindered	Not applicable
Experiencing impacts from past storms	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Available budget	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local or regional policies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State or federal policies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aging infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local political support	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipal partners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having up-to-date technology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having public support	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not being empowered to make changes to the wastewater system	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organizational leadership	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having incentives to learn about resilient wastewater systems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having sound science about how future climate extremes may impact our region	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having sound science about how future climate extremes may impact our wastewater system	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not having a trusted information source to provide guidance about how to adapt to future climate extremes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q24. How concerned are you about future impacts on your wastewater system? For each statement, please indicate your level of concern:

	Not at all concerned	A little concerned	Somewhat concerned	Greatly concerned	Not applicable
Future river flooding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Future coastal flooding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Future storm surge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sea level rise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Questions in this section concern your wastewater treatment control facility (WPCF).**

Q26. Please provide the name and location for your WPCF including GPS coordinates, if available:

Name of WPCF	Naugatuck WPCF
Street Address	500 Cherry Street
Zipcode	06770
GPS Coordinate (Latitude)	41.47
GPS Coordinate (Longitude)	-73.05

Q27. Is Naugatuck WPCF located in a coastal area?  Yes  No

Q28. Is Naugatuck WPCF located in a flood zone?  Yes  No

Q29. What is the 100 year flood elevation (ft) for the Naugatuck WPCF?

20

Q30. What is the elevation datum for this site?

- NGVD 29  
 NAVD 88  
 Other \_\_\_\_\_

Q31. Can flood waters restrict access Naugatuck WPCF?  Yes  No

Q32. What flood protection exists at Naugatuck WPCF (e.g., dikes, berms, flood gates, etc.)?

None, though it is under evaluation as part of a facility plan. Main influent pumps are submersible.

Q33. This is a two part question. In the first column, please list up to five critical structures at the Naugatuck WPCF that may be impacted by flooding, excluding pump stations. A critical structure might include primary settling tank, aeration basin, disinfection, etc.

Next in column 2, adjacent to each critical structure please list the flood elevation (ft) for that structure and note what the flood elevation represents (e.g., top of basin wall, bottom of electrical panel, etc.)

Critical Structures (excluding pump stations):	Name of critical structure	Flood elevations (ft):
Critical structure 1	Primary Settling	37, top of basin wall
Critical structure 2	Aeration Tanks	37, top of basin

Critical structure 3	Disinfection	25, top of basin
Critical structure 4	Secondaries	30, top of basin
Critical structure 5	Tunnel	15, bottom of wall

Q34. Please provide the location, elevation, and receiving water for the outfall from Naugatuck WPCF:

Location (GPS, if available):	41.47, -73.05
Elevation (ft):	14
Body of water discharged into:	Naugatuck River

Q35. Do you have any back-up power generators at Naugatuck WPCF?

Yes  No

Q36. How many back-up power generators do you have at the WPCF? 1

Q37. In the event of a storm and power loss, what process or processes are bypassed?

Secondary treatment, dewatering and incineration

Q38. In the event of a storm and power loss, is there any additional information/constraints you know of that DEEP should be aware of in an emergency situation?

None

**Questions 39-44 repeated for each generator.**

Q39. For Generator 1, please provide the size and age:

Unit Size	400 KW
Age (years)	10

Q40. What condition is Generator 1?

- Poor  
 Fair  
 Good  
 Very Good  
 Excellent

Q41. What is the fuel source for Generator 1?

- Natural Gas  
 Oil (2000 Gallon Tank)  
 Propane  
 Renewable

Q42. Is Generator 1 permanent or portable?

- Permanent  
 Portable

Q43. In the event of a storm and power loss, what process (or processes) are connected to Generator 1?  
RSPs, hot oil pumps, hot oil cooler, secondary scrubber and chemical pumps, foul odor fan, primary sludge pumps, plant water pumps, disinfection pumps

Q44. In the event of a storm and power loss, how long can Generator 1 run with the fuel supply available at this WPCF?

- 1-2 days  
 3-5 days

- 6-7 days
- more than 1 week

**Questions in this section pertain to your wastewater pump stations.**

Q46. Do you have any pump stations, including any pump stations that are part of your collection system or that are at your WPCF(s)?  Yes  No

Q47. We need to gather information about each pump station in your system. How many pump stations do you have, including pump stations at your WPCF(s)?  
5

**Questions 48-62 repeated for each pump station.**

Pump Station No. 1

Q48. Please list the pump station No. 1 name, physical address, and GPS coordinates.

Pump station name	Inwood
Street Address:	490 Maple Hill Road
City	Naugatuck
Zipcode	06770
GPS Coordinate (Latitude)	41.49
GPS Coordinate (Longitude)	-73.01

Q49. What is the 100 year flood elevation for this pump station?  
50

Q50. What is the elevation datum for this site?

- NGVD 29
- NAVD 88
- Other \_\_\_\_\_

Q51. Is this pump station operated manually or is it capable of automatic operation?

- Manual
- Automatic

Q52. Do staff monitor this pump station during normal business hours?

- Yes
- No

Q53. Do staff monitor this pump station outside of normal business hours?

- Yes
- No

Q54. Do staff make on-site visits to this pump station daily to check operation and maintenance?

- Yes
- No

Q55. Is there a generator at this pump station?

- Yes
- No

Q56. Please provide the size and age of the generator at this pump station:

Unit Size	55 KW
Age (years)	40

Q57. What condition is the generator at this pump station?

- Poor
- Fair
- Good
- Very Good
- Excellent

Q58. What is the fuel source for the generator at this pump station?

- Natural Gas
- Oil
- Propane
- Renewable

Q59. Is the generator at this pump station permanent or portable?

- Permanent
- Portable

Q60. Is the generator at this pump station susceptible to flooding in the event of a severe storm?

- Yes
- No

Q61. In the event of a storm and power loss, how long can the generator run with the fuel supply available at the pump station?

- 1-2 days
- 3-5 days
- 6-7 days
- more than 1 week

Q62. Are there any comments or concerns about this pump station that you would like to make DEEP aware of in the event of a future emergency situation?

None

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Pump Station No. 2

Q48. Please list the pump station No. 2 name, physical address, and GPS coordinates.

Pump station name	Hop Brook
Street Address:	615 Church Street
City	Naugatuck
Zipcode	06770
GPS Coordinate (Latitude)	41.5
GPS Coordinate (Longitude)	-73.05

Q49. What is the 100 year flood elevation for this pump station?

50

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Q50. What is the elevation datum for this site?

- NGVD 29
- NAVD 88
- Other \_\_\_\_\_

Q51. Is this pump station operated manually or is it capable of automatic operation?

- Manual
- Automatic

Q52. Do staff monitor this pump station during normal business hours?

- Yes
- No

Q53. Do staff monitor this pump station outside of normal business hours?

- Yes  
 No

Q54. Do staff make on-site visits to this pump station daily to check operation and maintenance?

- Yes  
 No

Q55. Is there a generator at this pump station?

- Yes  
 No

Q56. Please provide the size and age of the generator at this pump station:

Unit Size	15 KW
Age (years)	30

Q57. What condition is the generator at this pump station?

- Poor  
 Fair  
 Good  
 Very Good  
 Excellent

Q58. What is the fuel source for the generator at this pump station?

- Natural Gas  
 Oil  
 Propane (120 gallons tank)  
 Renewable

Q59. Is the generator at this pump station permanent or portable?

- Permanent  
 Portable

Q60. Is the generator at this pump station susceptible to flooding in the event of a severe storm?

- Yes  
 No

Q61. In the event of a storm and power loss, how long can the generator run with the fuel supply available at the pump station?

- 1-2 days  
 3-5 days  
 6-7 days  
 more than 1 week

Q62. Are there any comments or concerns about this pump station that you would like to make DEEP aware of in the event of a future emergency situation?

None

Pump Station No. 3

Q48. Please list the pump station No. 3 name, physical address, and GPS coordinates.

Pump station name	Horton Hill
Street Address:	541 Horton Hill Road
City	Naugatuck
Zipcode	06770
GPS Coordinate (Latitude)	41.47
GPS Coordinate (Longitude)	-73.01

Q49. What is the 100 year flood elevation for this pump station?

50

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Q50. What is the elevation datum for this site?

- NGVD 29  
 NAVD 88  
 Other \_\_\_\_\_

Q51. Is this pump station operated manually or is it capable of automatic operation?

- Manual  
 Automatic

Q52. Do staff monitor this pump station during normal business hours?

- Yes  
 No

Q53. Do staff monitor this pump station outside of normal business hours?

- Yes  
 No

Q54. Do staff make on-site visits to this pump station daily to check operation and maintenance?

- Yes  
 No

Q55. Is there a generator at this pump station?

- Yes  
 No

Q56. Please provide the size and age of the generator at this pump station:

Unit Size	20 KW
Age (years)	30

Q57. What condition is the generator at this pump station?

- Poor  
 Fair  
 Good  
 Very Good  
 Excellent

Q58. What is the fuel source for the generator at this pump station?

- Natural Gas  
 Oil  
 Propane  
 Renewable

Q59. Is the generator at this pump station permanent or portable?

- Permanent  
 Portable

Q60. Is the generator at this pump station susceptible to flooding in the event of a severe storm?

- Yes  
 No

Q61. In the event of a storm and power loss, how long can the generator run with the fuel supply available at the pump station?

- 1-2 days  
 3-5 days

- 6-7 days
- more than 1 week

Q62. Are there any comments or concerns about this pump station that you would like to make DEEP aware of in the event of a future emergency situation?  
 None

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Pump Station No. 4

Q48. Please list the pump station No. 4 name, physical address, and GPS coordinates.

Pump station name	Maple and May
Street Address:	360 Maple Hill Road
City	Naugatuck
Zipcode	6770
GPS Coordinate (Latitude)	41.49
GPS Coordinate (Longitude)	-73.01

Q49. What is the 100 year flood elevation for this pump station?  
 50

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Q50. What is the elevation datum for this site?

- NGVD 29
- NAVD 88
- Other \_\_\_\_\_

Q51. Is this pump station operated manually or is it capable of automatic operation?

- Manual
- Automatic

Q52. Do staff monitor this pump station during normal business hours?

- Yes
- No

Q53. Do staff monitor this pump station outside of normal business hours?

- Yes
- No

Q54. Do staff make on-site visits to this pump station daily to check operation and maintenance?

- Yes
- No

Q55. Is there a generator at this pump station?

- Yes
- No

Q56. Please provide the size and age of the generator at this pump station:

Unit Size	25 KW
Age (years)	30

Q57. What condition is the generator at this pump station?

- Poor
- Fair
- Good
- Very Good
- Excellent

Q58. What is the fuel source for the generator at this pump station?

- Natural Gas
- Oil (100 gallon tank)
- Propane
- Renewable

Q59. Is the generator at this pump station permanent or portable?

- Permanent
- Portable

Q60. Is the generator at this pump station susceptible to flooding in the event of a severe storm?

- Yes
- No

Q61. In the event of a storm and power loss, how long can the generator run with the fuel supply available at the pump station?

- 1-2 days
- 3-5 days
- 6-7 days
- more than 1 week

Q62. Are there any comments or concerns about this pump station that you would like to make DEEP aware of in the event of a future emergency situation?

None

---

Pump Station No. 5

Q48. Please list the pump station No. 5 name, physical address, and GPS coordinates.

Pump station name	Platts Mill
Street Address:	133 Platts Mill Road
City	Naugatuck
Zipcode	6770
GPS Coordinate (Latitude)	41.5
GPS Coordinate (Longitude)	-73.05

Q49. What is the 100 year flood elevation for this pump station?

30

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Q50. What is the elevation datum for this site?

- NGVD 29
- NAVD 88
- Other \_\_\_\_\_

Q51. Is this pump station operated manually or is it capable of automatic operation?

- Manual
- Automatic

Q52. Do staff monitor this pump station during normal business hours?

- Yes
- No

Q53. Do staff monitor this pump station outside of normal business hours?

- Yes
- No

Q54. Do staff make on-site visits to this pump station daily to check operation and maintenance?

- Yes
- No

Q55. Is there a generator at this pump station?

- Yes  
 No

Q56. Please provide the size and age of the generator at this pump station:

Unit Size	18 KW
Age (years)	30

Q57. What condition is the generator at this pump station?

- Poor  
 Fair  
 Good  
 Very Good  
 Excellent

Q58. What is the fuel source for the generator at this pump station?

- Natural Gas  
 Oil  
 Propane  
 Renewable

Q59. Is the generator at this pump station permanent or portable?

- Permanent  
 Portable

Q60. Is the generator at this pump station susceptible to flooding in the event of a severe storm?

- Yes  
 No

Q61. In the event of a storm and power loss, how long can the generator run with the fuel supply available at the pump station?

- 1-2 days  
 3-5 days  
 6-7 days  
 more than 1 week

Q62. Are there any comments or concerns about this pump station that you would like to make DEEP aware of in the event of a future emergency situation?

None

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Q63. Are you the contact person for your Collection System during normal weekday hours?

- Yes  
 No

Q64. Who is the appropriate contact person for your Collection System during normal weekday hours?

Name (Last name, First name)	Makuch, Chris
Telephone number	203-723-1433
Mobile phone number	203-509-4740

Q65. Are you the contact person for your Collection System during weekend hours?

- Yes  
 No

Q66. Who is the appropriate contact person for your Collection System during weekend hours?

Name (Last name, First name)	Forish, Mike
Telephone number	203-509-6012
Mobile phone number	203-509-6012

Q67. Are you the contact person for your Collection System during emergencies?

- Yes  
 No

Q68. Who is the appropriate contact person for your Collection System during emergencies?

Name (Last name, First name)	Forish, Mike
Telephone number	203-509-6012
Mobile phone number	203-509-6012

ODOR COMPLAINT REPORT

CALLER INFORMATION: DATE: 11-12-15 TIME: 1:00 pm

CALL TAKEN BY: Robert Mezzo (sent via email)

NAME OF COMPLAINANT: PHONE NUMBER:

ADDRESS/LOCATION WHERE ODOR IS BEING DETECTED:

Lewis St.

STRENGTH OF ODOR: FAINT NOTICABLE DEFINITE STRONG OVERWHELMING

DESCRIPTION OF ODOR: AMMONIA CABBAGE FECAL FISHY GARLIC MEDICINAL ROTTEN EGGS SKUNKY SOLVENT/FUEL OTHER

DOES THE CALLER WANT A FOLLOW-UP CALL? YES NO

DON'T FORGET TO THANK THE CALLER FOR THEIR CONCERN!!

ODOR INVESTIGATION:

(FROM CONTROL ROOM WEATHER STATION)

See attached from weather station

WIND DIRECTION: WIND SPEED: WEATHER: TEMP RAIN HUMID DRY UNSEASONABLY WARM/COLD

COMPLETE PLANT SURVEY LISTING POSSIBLE SOURCES OF ODORS CONTRIBUTING TO THE COMPLAINT:

cake truck unloading @ 9:30 AM

ODOR CONTROL EQUIPMENT STATUS:

PRIMARY SCRUBBER: ON OFF PH 8.4 ORP 885 MAKE UP WATER: 0.5-1 GPM SPRAYS

FILTER BLDG SCRUBBER: ON OFF PH 8.4 ORP 846.5 MAKE UP WATER: 1-3 GPM SPRAYS

PERMANGANATE FEEDERS:

AERATION: ON OFF VERIFIED OPERATIONAL: YES NO

SLUDGE STORAGE: ON OFF VERIFIED OPERATIONAL: YES NO

ODOR COUNTERACTANT SYSTEM: ON OFF VERIFIED OPERATIONAL: YES SPRAYS

COMPLAINT REVIEWED BY: J Butarik DATE: 11-13-15 TIME: ~ 7 AM

RETURN CALL MADE BY: DATE: TIME:

RETURN CALL RESULTS:

Please see attached email.



Batorski, John &lt;john.batorski@veolia.com&gt;

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**Re: Odor Complaint**

1 message

**Batorski, John** <john.batorski@veolia.com>

13 November 2015 at 09:26

To: Jim Stewart &lt;JStewart@naugatuck-ct.gov&gt;, Bob Mezzo &lt;bob@bobmezzo.com&gt;

The cabbage odor was reported at mid morning. A cake truck unloaded at ~9:45 AM and staff reports that they did not observe any odors with that truck. The cake truck that dumped was in/out in less than 15 minutes. No other cake trucks were onsite until after lunch. Since all plant odor systems were operating fine and no trucks unloading it is difficult to determine the cause. Depending upon the location, Lewis Street is anywhere from 1/2 to 3/4 of a mile from the plant. An odor that would reach that area should have drawn the attention of plant staff. Checking with the staff, no one observed an odor. I wish they had called the plant as we would have immediately went to the area.

Sorry I was not able to provide more information.

**John Batorski**  
*Plant Manager - Northeast LLC*  
*Municipal & Commercial Business*  
**VEOLIA NORTH AMERICA**

tel +1 203 723 1433 / cell +1 203 509 6010  
500 Cherry Street / Naugatuck, CT 06770  
[John.Batorski@veolia.com](mailto:John.Batorski@veolia.com)  
[www.veolionorthamerica.com](http://www.veolionorthamerica.com)

Resourcing the world  **VEOLIA**



On 12 November 2015 at 16:22, Jim Stewart <JStewart@naugatuck-ct.gov> wrote:

FYI

Jim Stewart  
Cell Phone

Begin forwarded message:

**From:** Bob Mezzo <bob@bobmezzo.com>  
**Date:** November 12, 2015 at 4:21:28 PM EST  
**To:** Jim Stewart <JStewart@naugatuck-ct.gov>  
**Subject:** Re: Odor Complaint

Hi Jim:

This morning (11/12/2015). I received the call from the resident mid-morning.

Thanks.

Bob

Sent from my iPhone  
Bob

On Nov 12, 2015, at 4:15 PM, Jim Stewart <JStewart@naugatuck-ct.gov> wrote:

Mayor

Veolia is asking when the odor occurred?

Jim

Jim Stewart  
Cell Phone

Begin forwarded message:

**From:** "Batorski, John" <john.batorski@veolia.com>  
**Date:** November 12, 2015 at 2:39:22 PM EST  
**To:** Jim Stewart <JStewart@naugatuck-ct.gov>  
**Subject:** Re: FW: Odor Complaint

Hello Jim,

Do you know what time and the date they smelled an odor?

Thanks,

**John Batorski**  
*Plant Manager - Northeast LLC*  
*Municipal & Commercial Business*  
**VEOLIA NORTH AMERICA**

tel +1 203 723 1433 / cell +1 203 509 6010  
500 Cherry Street / Naugatuck, CT 06770  
[John.Batorski@veolia.com](mailto:John.Batorski@veolia.com)  
[www.veolianorthamerica.com](http://www.veolianorthamerica.com)

Resourcing the world  **VEOLIA**



On 12 November 2015 at 13:00, Jim Stewart <JStewart@naugatuck-ct.gov> wrote:

John

Please respond to me and the mayor asap

Regards

**From:** Bob Mezzo [mailto:bob@bobmezzo.com]  
**Sent:** Thursday, November 12, 2015 9:48 AM  
**To:** Jim Stewart  
**Subject:** Odor Complaint

Hi Jim:

I received an odor complaint from an resident who lives on Lewis Street. Please contact Veolia to report. The resident stated that it smelled like bad cabbage.

Please let me know if there is an explanation for the smell.

Thanks.

Bob

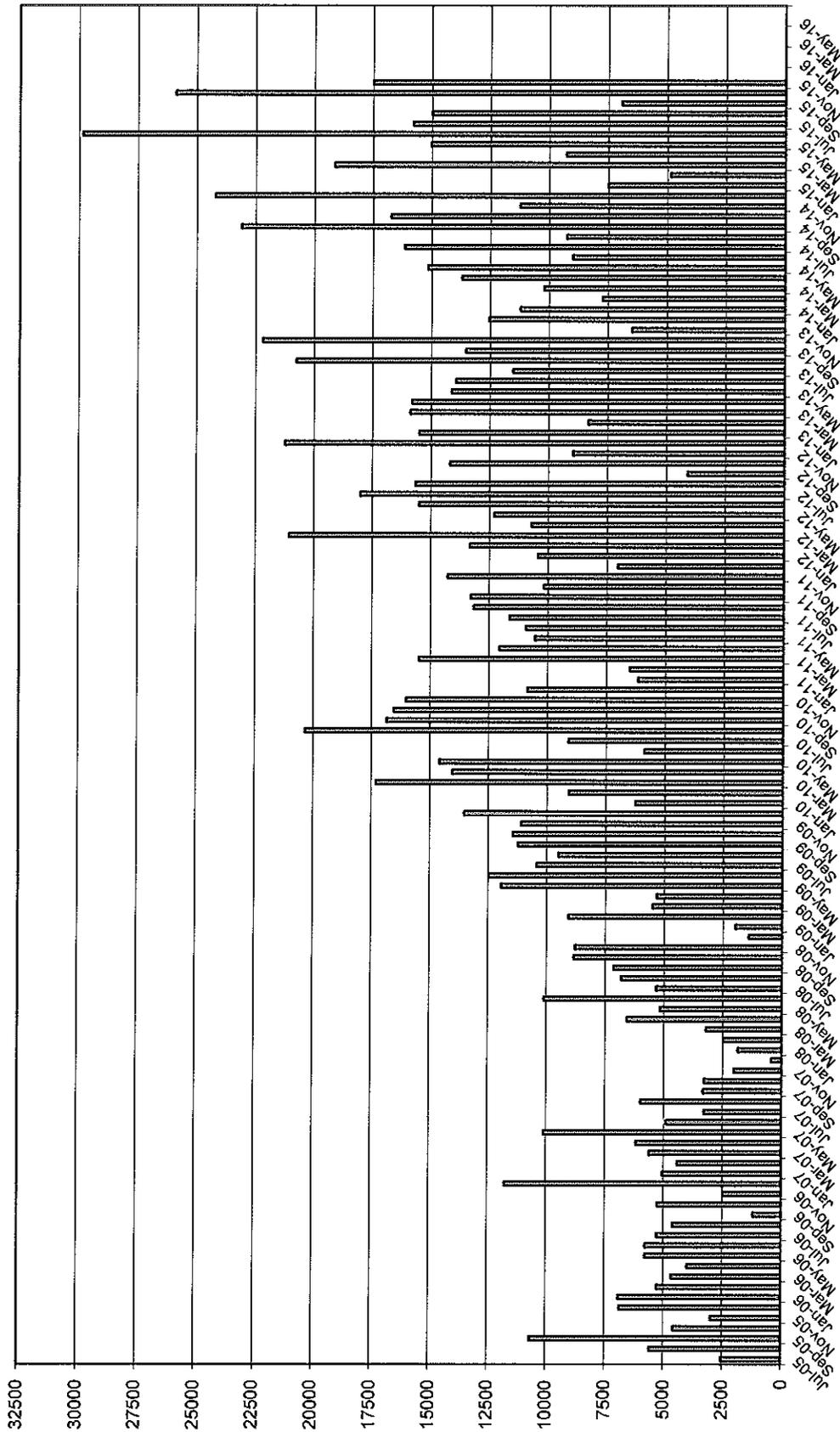
Robert A. Mezzo  
Email: bob@bobmezzo.com  
Blog: www.bobmezzo.com  
Cell: 203-217-0876



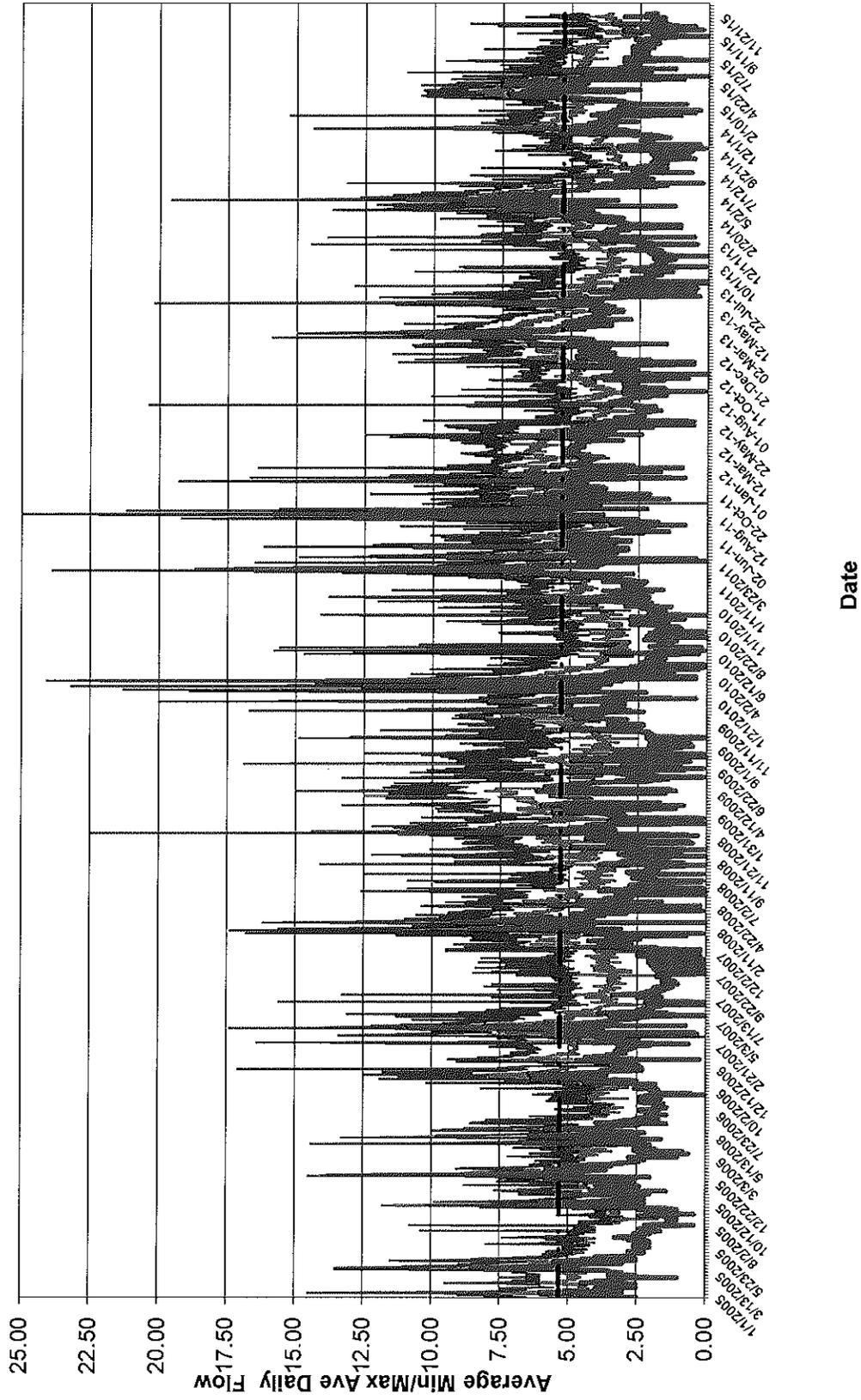
Date	Time	Temp		Hi	Low	Out	Hum	Dew Pt.	Wind Speed	Wind Dir	Wind Run	Hi Speed	Hi Dir	Wind Chill	Heat Index	THW Index	Bar	Rain Rate	Rain	Heat		Cool	
		Out	Temp																	D-D	D-D		
11/12/15	7:30a	48.9	48.9	48.9	48.8	96	47.8	1.0	ENE	0.08	4.0	ENE	48.9	49.4	49.4	49.4	---	0.00	0.00	0.056	0.000	0.000	76
11/12/15	7:35a	48.9	48.9	48.9	48.8	96	47.8	1.0	E	0.08	6.0	SSE	48.9	49.4	49.4	49.4	---	0.00	0.00	0.056	0.000	0.000	75
11/12/15	7:40a	48.8	48.9	48.8	48.8	96	47.7	1.0	ESE	0.08	5.0	ESE	48.8	49.3	49.3	49.3	---	0.00	0.00	0.056	0.000	0.000	75
11/12/15	7:45a	48.6	48.8	48.6	48.6	96	47.5	2.0	ENE	0.17	5.0	ENE	48.6	49.1	49.1	49.1	---	0.00	0.00	0.057	0.000	0.000	75
11/12/15	7:50a	48.3	48.6	48.3	48.3	96	47.2	2.0	NE	0.17	5.0	ENE	48.3	48.8	48.8	48.8	---	0.00	0.00	0.058	0.000	0.000	76
11/12/15	7:55a	48.2	48.3	48.2	48.2	96	47.1	2.0	NE	0.17	5.0	NE	48.2	48.7	48.7	48.7	---	0.00	0.00	0.058	0.000	0.000	76
11/12/15	8:00a	48.1	48.2	48.1	48.1	96	47.0	1.0	NE	0.08	3.0	ENE	48.1	48.5	48.5	48.5	---	0.00	0.00	0.059	0.000	0.000	76
11/12/15	8:05a	48.0	48.1	48.0	48.0	96	46.9	1.0	NE	0.08	2.0	NE	48.0	48.4	48.4	48.4	---	0.00	0.00	0.059	0.000	0.000	76
11/12/15	8:10a	48.1	48.1	48.1	48.0	96	47.0	2.0	E	0.17	4.0	ENE	48.1	48.5	48.5	48.5	---	0.00	0.00	0.059	0.000	0.000	75
11/12/15	8:15a	48.2	48.2	48.1	48.1	97	47.4	1.0	ESE	0.08	5.0	E	48.2	48.7	48.7	48.7	---	0.00	0.00	0.058	0.000	0.000	76
11/12/15	8:20a	48.3	48.3	48.2	48.2	97	47.5	3.0	ESE	0.25	5.0	ESE	47.7	48.8	48.8	48.2	---	0.01	0.00	0.058	0.000	0.000	76
11/12/15	8:25a	48.2	48.2	48.2	48.2	97	47.4	2.0	ESE	0.17	5.0	ESE	48.2	48.7	48.7	48.7	---	0.00	0.06	0.059	0.000	0.000	76
11/12/15	8:30a	48.0	48.1	48.0	48.0	96	46.9	2.0	ESE	0.17	5.0	ESE	48.0	48.4	48.4	48.4	---	0.00	0.04	0.058	0.000	0.000	76
11/12/15	8:35a	48.3	48.3	48.0	48.3	100	48.3	3.0	ESE	0.25	6.0	E	47.7	48.9	48.3	48.3	---	0.00	0.00	0.057	0.000	0.000	75
11/12/15	8:40a	48.6	48.6	48.4	48.3	97	47.8	2.0	ESE	0.17	5.0	E	48.6	49.1	49.1	49.1	---	0.00	0.00	0.057	0.000	0.000	75
11/12/15	8:45a	48.5	48.6	48.4	48.4	97	47.7	3.0	ESE	0.25	7.0	ESE	48.0	49.0	48.5	48.5	---	0.00	0.00	0.057	0.000	0.000	75
11/12/15	8:50a	48.2	48.4	48.2	48.2	96	47.1	4.0	SE	0.33	6.0	SE	46.8	48.7	47.3	47.3	---	0.00	0.00	0.058	0.000	0.000	75
11/12/15	8:55a	48.1	48.2	48.1	48.1	97	47.3	3.0	SE	0.25	5.0	SE	47.5	48.6	48.0	48.0	---	0.00	0.00	0.059	0.000	0.000	76
11/12/15	9:00a	48.2	48.2	48.1	48.1	97	47.4	3.0	SE	0.25	6.0	SE	47.6	48.7	48.1	48.1	---	0.00	0.00	0.058	0.000	0.000	76
11/12/15	9:05a	48.3	48.3	48.2	48.2	97	47.5	3.0	ESE	0.25	5.0	ESE	47.7	48.8	48.2	48.2	---	0.00	0.00	0.058	0.000	0.000	75
11/12/15	9:10a	48.4	48.4	48.3	48.3	97	47.6	1.0	ESE	0.08	4.0	ESE	48.4	48.9	48.9	48.9	---	0.00	0.00	0.057	0.000	0.000	75
11/12/15	9:15a	48.5	48.5	48.4	48.4	97	47.7	2.0	ESE	0.17	7.0	ESE	48.5	49.0	49.0	49.0	---	0.00	0.00	0.058	0.000	0.000	75
11/12/15	9:20a	48.8	48.8	48.8	48.5	97	48.0	2.0	ESE	0.17	7.0	ESE	48.8	49.3	49.3	49.3	---	0.00	0.00	0.056	0.000	0.000	76
11/12/15	9:25a	49.1	49.1	49.1	48.8	97	48.3	2.0	ESE	0.17	6.0	E	49.1	49.6	49.6	49.6	---	0.00	0.00	0.055	0.000	0.000	76
11/12/15	9:30a	49.0	49.2	49.0	49.0	97	48.2	5.0	ESE	0.42	7.0	ESE	47.0	49.5	47.5	47.5	---	0.00	0.00	0.056	0.000	0.000	76
11/12/15	9:35a	49.1	49.1	49.1	48.9	97	48.3	3.0	E	0.25	5.0	ESE	48.6	49.6	49.1	49.1	---	0.00	0.00	0.055	0.000	0.000	75
11/12/15	9:40a	49.6	49.6	49.6	49.2	98	49.1	2.0	ENE	0.17	5.0	E	49.6	50.2	50.2	50.2	---	0.00	0.00	0.053	0.000	0.000	75
11/12/15	9:45a	49.4	49.6	49.6	49.4	97	48.6	1.0	ENE	0.08	4.0	ENE	49.4	50.0	50.0	50.0	---	0.00	0.00	0.054	0.000	0.000	75
11/12/15	9:50a	49.3	49.5	49.5	49.3	97	48.5	1.0	E	0.08	4.0	E	49.3	49.9	49.9	49.9	---	0.00	0.00	0.055	0.000	0.000	76
11/12/15	9:55a	49.3	49.4	49.3	49.3	97	48.5	2.0	ESE	0.17	5.0	ESE	49.3	49.9	49.9	49.9	---	0.00	0.00	0.055	0.000	0.000	76
11/12/15	10:00a	49.5	49.5	49.3	49.3	97	48.7	2.0	ENE	0.17	4.0	E	49.5	50.1	50.1	50.1	---	0.00	0.00	0.054	0.000	0.000	75
11/12/15	10:05a	49.2	49.5	49.2	49.2	97	48.4	3.0	ENE	0.25	5.0	ENE	48.7	49.7	49.2	49.2	---	0.00	0.00	0.055	0.000	0.000	75
11/12/15	10:10a	49.1	49.2	49.1	49.1	97	48.3	1.0	NE	0.08	3.0	ENE	49.1	49.6	49.6	49.6	---	0.02	0.28	0.055	0.000	0.000	75
11/12/15	10:15a	49.3	49.3	49.1	49.1	97	48.5	1.0	ESE	0.08	4.0	ESE	49.3	49.9	49.9	49.9	---	0.01	0.28	0.055	0.000	0.000	75
11/12/15	10:20a	49.1	49.3	49.1	49.1	97	48.3	4.0	ESE	0.33	6.0	ESE	47.8	49.6	48.3	48.3	---	0.01	0.19	0.055	0.000	0.000	76
11/12/15	10:25a	49.2	49.2	49.1	49.1	97	48.4	4.0	ESE	0.33	5.0	ESE	47.9	49.7	48.4	48.4	---	0.01	0.16	0.055	0.000	0.000	76
11/12/15	10:30a	49.3	49.3	49.2	49.2	98	48.8	3.0	ESE	0.25	5.0	ESE	48.9	49.9	49.5	49.5	---	0.00	0.08	0.055	0.000	0.000	76
11/12/15	10:35a	49.6	49.6	49.3	49.3	98	49.1	3.0	ESE	0.25	6.0	ESE	49.2	50.2	49.8	49.8	---	0.00	0.05	0.053	0.000	0.000	75
11/12/15	10:40a	49.7	49.8	49.6	49.6	98	49.2	3.0	ESE	0.25	6.0	E	49.3	50.3	49.9	49.9	---	0.01	0.05	0.053	0.000	0.000	76
11/12/15	10:45a	49.5	49.7	49.5	49.5	98	49.0	4.0	ESE	0.33	5.0	ESE	48.3	50.1	48.9	48.9	---	0.00	0.05	0.054	0.000	0.000	76
11/12/15	10:50a	49.5	49.5	49.4	49.4	98	49.0	5.0	ESE	0.42	7.0	ESE	47.6	50.1	48.2	48.2	---	0.00	0.04	0.054	0.000	0.000	76
11/12/15	10:55a	49.8	49.8	49.5	49.5	98	49.3	3.0	ESE	0.25	5.0	ESE	49.5	50.4	50.1	50.1	---	0.00	0.00	0.053	0.000	0.000	76
11/12/15	11:00a	50.2	50.2	49.8	49.8	98	49.7	3.0	ENE	0.25	5.0	ENE	49.9	50.8	50.5	50.5	---	0.00	0.00	0.051	0.000	0.000	77
11/12/15	11:05a	50.4	50.5	50.2	50.2	98	49.9	3.0	ENE	0.25	5.0	ENE	50.1	51.0	51.2	51.2	---	0.00	0.00	0.050	0.000	0.000	76
11/12/15	11:10a	50.6	50.6	50.4	50.4	98	50.1	2.0	ESE	0.17	5.0	ESE	50.6	51.2	51.2	51.2	---	0.00	0.00	0.050	0.000	0.000	76
11/12/15	11:15a	50.6	50.6	50.6	50.6	98	50.1	1.0	NE	0.08	5.0	NE	50.6	51.2	51.2	51.2	---	0.01	0.05	0.050	0.000	0.000	76
11/12/15	11:20a	50.8	50.8	50.6	50.6	98	50.3	4.0	SSE	0.33	9.0	SSE	49.8	51.3	50.3	50.3	---	0.00	0.05	0.049	0.000	0.000	76
11/12/15	11:25a	50.8	50.8	50.8	50.8	98	50.3	6.0	ESE	0.50	10.0	SE	48.7	51.3	49.2	49.2	---	0.00	0.05	0.049	0.000	0.000	76
11/12/15	11:30a	51.0	51.0	50.8	50.8	98	50.5	4.0	SE	0.33	12.0	SSE	50.0	51.5	50.5	50.5	---	0.00	0.04	0.049	0.000	0.000	77

Borough of Naugatuck  
Total Feet of Sewers Cleaned  
July 2005 to Present

Total Feet



# Naugatuck WPCF Daily Min/Max/Total Flow Data 2005 to Present MGD



Date

Effluent Flow Average    
  Effluent Flow Max    
  Effluent Flow Minimum    
  Linear (Effluent Flow Average)

# Naugatuck, Middlebury and Oxford 2005 to Present Monthly Average Flows

