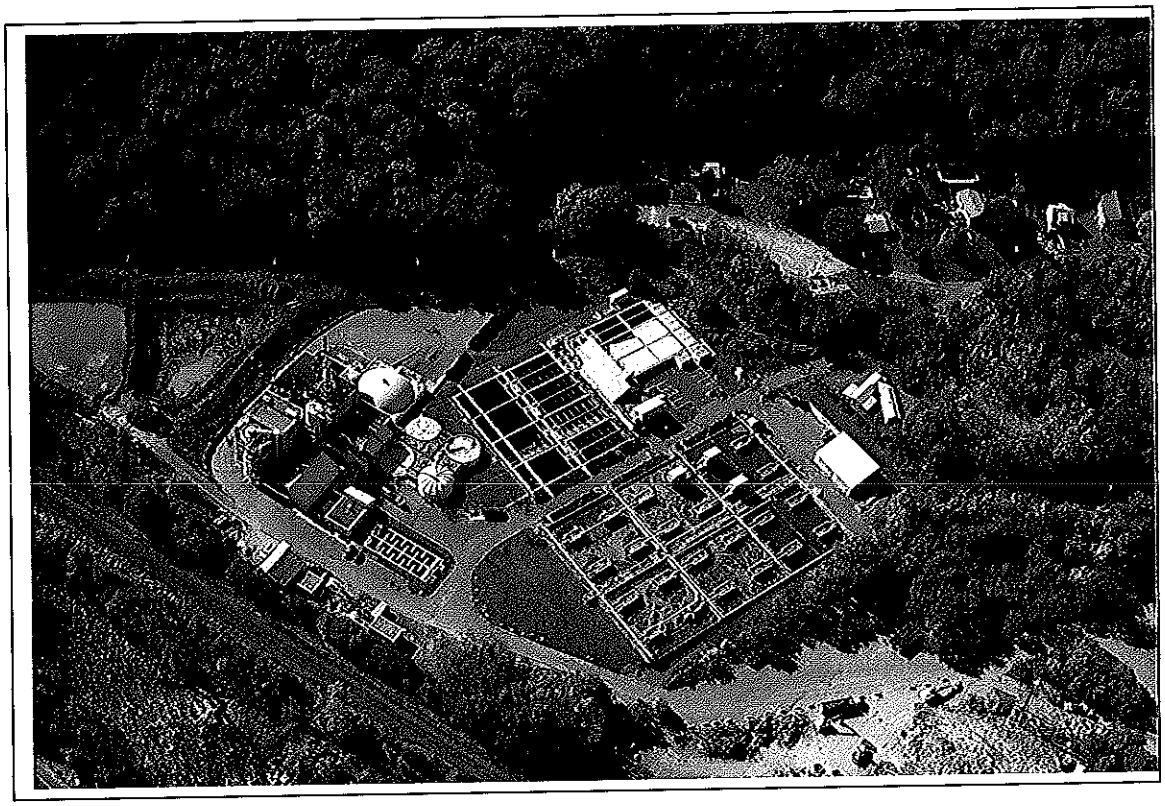

Borough of Naugatuck
Water Pollution Control Facility
Monthly Operating Report
January 2016

VEOLIA

February 10, 2016

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

Re: **January 2016 Monthly Operating Report**

Dear Mr. Merancy:

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

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

Sincerely,
Veolia Water North America – Northeast, LLC

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)

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

Borough of Naugatuck
Monthly WPCF Report Jan 2016

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

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

Please see attached Collections Report.

3. **Plant Performance Summary:**

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

Plant Process Data	Limit	Actual
Total Suspended Solids (mg/l)		
Influent Avg.	-	250
Effluent Avg.	30	5
Removal Efficiency	85%	98%
Plant Process Data*	**Limit**	**Actual**
Carbonaceous BOD (mg/l)		
Influent Avg.	-	135
Eff Avg(Nov 1 – May 31)	25	
Eff Avg(June – Oct 31)	15	4
Removal Efficiency	85%	97%

Discharge Permit Exceedance: None

	Naugatuck	Middlebury	Oxford	OTR
Jan Flow Avg. (MGD)	4.76	0.547	0.042	N/A
Sludge Liquid Total (MGal)				3983.1
Sludge Cake Total (Wet Tons)				4222.0
Septage Total (MGal)	22,250	18,000	84,500	431,600

Discharge Permit Exceedance: None

Safety Incidents and Odor Complaints

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

1. **Compliance & Regulatory Issues**
   a. Wright Pierce was on site Jan 7 to review Bio P removal options. Additional phosphorous testing with PAC is underway for centrate, filtrate and thickener effluent.
   b. Kleinfelder was on site Jan 5, 13 and 22, 2016 for facility plan equipment assessment.
   c. On Jan 20, 2016 the Borough met with EPA in Boston to discuss incinerator MACT upgrades/extension. Veolia was also invited to that meeting.
   d. Kathy Luvisi was on site Jan 27 for the annual contractual inspection.
2. **Odor Complaints**
   a. There were no odor complaints in January.
3. **Personnel**
   a. A maintenance mechanic resigned in January. An operator resigned to accept another position closer to home. A second operator will transfer to a position at the Redding, CT WPCF. The two Operator positions were filled. Interviews are scheduled for the maintenance position.

4. **Health & Safety**
    a. The safety meeting was held on Jan 11 and 12, Hazard Communication was the topic.
    b. Annual respirator medical review and fit testing has been scheduled. In addition, annual audiograms have also been scheduled.
5. **Operational Information**
    a. The incinerator was shutdown (unscheduled) in late January for repairs.
    b. Sludge receiving tank #4 rake arms were replaced and modified to better handle rags.
    c. Centrifuge polymer and operation optimizing is under review.
6. **Collections**
    a. No report.
7. **Maintenance**
    a. The incinerator shutdown work will entail: refractory repairs as required, repairs to the tuyere manifold, replace the original thermal dryer control valves, main thermal fluid flow transmitter will be repaired/rebuilt, thermal fluid temperature control 36 inch butterfly valves will be repaired/rebuilt, incline conveyor from the thermal dryer will be repaired, the conveyor that feeds the thermal dryer will be repaired, and plows will be replaced on the thermal dryer. The heat exchangers (primary and secondary) were inspected by Alstom Power and found to be in good condition.

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

Borough of Naugatuck
Collections Systems Report
January 2016

VEOLIA WATER

	Calls for Service
1	01/05 - 47 Birch Ln - Lateral problem
2	01/07 - 144 Crestwood Dr - Lateral problem
3	01/26 - 89 Spruce Dr
4	01/26 - 33 Tudor Ln - Lateral problem
5	
6	

This Month	Year to Date
4	26

	Calls Caused By Collection System	Reason
1	89 Spruce Dr	Main line's structure was collapsed
2		
3		
4		

	High Velocity Cleaning		
	Street Name	Date	Footage
1	East Waterbury Rd 4-92 to 4-98	1/4/2016	1160
2	Autumn Ridge Rd 3-138 to 3-135	1/4/2016	420
3	Crestwood Dr 3-139 to 3-135	1/4/2016	100
4	Birch Ln 9-285 to 9-282	1/5/2016	215
5	Picture Ln 7-134 to 7-121	1/5/2016	1045
6	Crestwood Dr 3-149 to 4-112	1/6/2016	2103
7	Crestwood Dr 4-112 to 4-110	1/6/2016	260
8	Brittany Ln no m/h #s	1/7/2016	905
9	Christy Ln no m/h #s	1/7/2016	200
10	Michelle Ln no m/h #s	1/7/2016	250
11	Great Marsh Hill Rd no m/h #s	1/7/2016	350
12	City Hill St 7-173 to 7-171	1/11/2016	382
13	Marsh Hill Rd no m/h #s	1/13/2016	785
14	Marsh Hill Rd easement no m/h #s	1/13/2016	250
15	Ramsey Ave 3-126 to 3-123	1/13/2016	580
16	Pondview Dr no m/h #s	1/14/2016	1560
17	Old Marsh Rd no m/h #s	1/15/2016	95
18	Brittany Ln easement no m/h #s	1/15/2016	200
19	Gail Dr 3-131 to 3-121	1/19/2016	577
20	Ramsey Ave / Gail Dr easement 3-122 to 3-121	1/19/2016	317
21	Laurel Ave 13-128 to 13-125	1/20/2016	765
22	Gen Patton Dr 13-144 to 13-139	1/20/2016	290
23	Marjorie St 13-139 to 13-125	1/20/2016	120
24	Hazel Ave 13-108 to 13-105	1/21/2016	648
25	Marjorie St 13-105 to 13-104	1/21/2016	315
26	Marjorie St 13-125 to 13-104	1/21/2016	185
27	Spruce Dr no m/h #s	1/26/2016	220
28	Gen Dalton Dr 13-104 to 13-103	1/27/2016	310
29	Glendale Ct 13-150E to 13-150	1/27/2016	705
30	Gen Patton Dr 13-150 to end of line	1/27/2016	135
31	Gen Patton Dr 13-150 to 13-102	1/28/2016	675
32	Gen Dalton Dr 13-103 to 13-102	1/28/2016	310
33	Gen Patton Dr 13-147 to 13-102	1/28/2016	410

6 month list
Call for service

This Month		Year to Date	
16842	Feet	110657	Feet

	Root Treatment		
	Street Name	Type	Footage
1			
2			
3			

This Month		Year to Date	
0	Feet	6742	Feet

Video Inspections

	Street Name	Type	Footage
1	Crestwood Dr 3-144 downstrem	cctv	140
2	Crestwood Dr 4-11 downstream	cctv	30
3	Gen Dalton / Beacon Valley easement 15-31 to 15-7	cctv	200
4	Spruce Dr no m/h #s	cctv	270
5	Tudor Ln 10-222 to 10-221	cctv	100
6			
7			

This Month		Year to Date	
740	Feet	8725	Feet

Pump Station Services

	Work performed	Location	Date	Notes
1	Weekly pumpstation checks	all 5	1/5/2016	cleaned floats, gens exercised, high wetwell check
2	Weekly pumpstation checks	all 5	1/15/2016	cleaned floats
3	Weekly pumpstation checks	all 5	1/22/2016	cleaned floats
4	Weekly pumpstation checks	all 5	1/29/2016	cleaned floats, gens exercised, high wetwell check
5				
6				
7				

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Pump 3
Inwood	End Reading	710.7	924.4	353.3
	Start Reading	672.00	878.8	308.2
	Hrs Run	38.7	45.6	45.1

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
MAPLE & MAY	End Reading	3794.2	3014
	Start Reading	3751.5	2976.9
	Hrs Run	42.7	37.1

PUMP RUN TIMES		HOURS			
STATION		Pump 1	Pump 2	Flow meter	
Platts Mill	End Reading	4848.7	7459.2	3678500	
	Start Reading	4848.7	7319.7	3392395	
	Hrs Run	0	139.6	286105	gallons

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Hopbrook	End Reading	1403	969.6
	Start Reading	1382	960.5
	Hrs Run	21	9.1

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
HORTON HILL	End Reading	8695.1	10382.5
	Start Reading	8607.3	10306.1
	Hrs Run	87.8	76.4

Vac Truck Information

Days out of the plant working		
This Month	YTD	Remaining
14	105	45

Fuel Information	Fuel Cost	Fuel Used	Gallons	YTD Gallons	
	$152.43	61.5	Gallons	1247.5	Gallons
	$120.32	48.5	Gallons		
			Gallons	YTD Fuel Cost	
This Months Total	$272.75	110.0	Gallons	$3,449.57	

	Mileage
Month Start	194701.1
Month End	195560.1
Total	859

	Engine Hours
Month Start	6141.2
Month End	6192.4
Total	51.2

Utility Truck Information	Fuel Cost	Fuel Used		
	$67.52	26.18	Gallons	YTD Gallons
	$75.21	30.33	Gallons	352.45
	$56.06	22.61	Gallons	
			Gallons	YTD Fuel Cost
Monthly Totals:	$198.79	79.12	Gallons	$966.72

Other tasks and notes

1	01/02 - Installed new hydro motor for the water pump on Vac Truck.
2	01/11 - Broken water main on City Hill St - stayed on site with Vac Truck to inspect main sewer line.
3	01/11 - PM on Vac Truck was performed and new hydro filters were installed.
4	01/12 - Brought Service Truck in for service. Installed sander on the dump truck.
5	01/13 - Sanded the Plants parking lots and drop areas.
6	01/14 - Retrieved a broken lid out of a m/h's invert on Pondview Dr, no m/h #s.
7	01/18 - Sanded the Plants parking lots and drop areas. Primary skimmings 1 load. Cleaned collections garage area.
8	01/19 - Painted the beams under the foreign sludge bin area.
9	01/20 - Vacuumed out and cleaned wetwell at Hopbrook. Vacuumed out and cleaned wet well at Maple&May.
10	01/22 - Went to all 5 pumpstations with engineers for inspections.
11	01/23 - Snow removal at the Plant.
12	01/25 - Finished up snow removal at the Plant and removed snow at all 5 pumpstations.
13	01/26 - Dig with G&L on Spruce Dr to replace collapsed pipe. Vac Truck on site to bypass line.
14	01/27 - Took Kathy around to all 5 pumpstations for inspections.
15	01/28 - Found and inspected uncovered m/h on Gen Dalton / Beacon Valley Rd easement.
16	
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VEOLIA

Sent via certified mail #7014 1200 0002 2236 9944 on February 9, 2016

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

February 9, 2016

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

Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report* for January 2016. 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 January 2016.

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

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

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

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

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

	Daily Flow			Primary Sludge			Aeration Tank #1				Return Sludge		Aeration Tank #2				Return Sludge		Waste Sludge	Dry Solids to Incineration	Waste Accepted		CBOD (5-Day)		
	Max.	Min.	Total	Vol.	% solids	wt.	MLSS	SVI	High D.O.	Low D.O.			MLSS	SVI	High D.O.	Low D.O.	% Flow	%Solids			Septic	Indust	Inf.	Prim eff.	Final eff.
Units	mgd			MG		lbs.			mg/l		% Flow	% Solids			mg/l				lbs	lbs	gal	gal	mg/l		
Freq	Daily			Work Day			Work Day		4/ work day				Work Day		4/Work Day		Work Day		Wk Day	Wk Day	Work Day		3/week		
1	6.3	3.2	4.8	0.494					2.0	0.8	207				2.1	0.6	207		6,814	126,720	3,000				
2	6.2	3.2	4.7	0.511					2.2	0.6	197				2.1	0.8	197		6,814	144,168	14,000				
3	5.8	3.1	4.7	0.499					4.0	0.2	223				4.3	0.5	223		6,814	155,664	0				
4	5.5	3.3	4.6	0.472			5,804	76	2.6	0.1	196	1.06	6,776	74	2.8	0.0	196	1.36	6,176	116,418	24,750		150	120	<4
5	5.7	2.6	4.4	0.471			6,988	66	2.2	0.6	211	1.22	5,608	93	2.1	1.0	211	1.37	6,610	146,328	25,750		150		<4
6	5.3	2.6	4.3	0.473			5,976	75	2.1	0.9	224	1.19	6,916	72	2.1	0.9	224	1.41	6,635	146,328	29,000		190		<4
7	5.6	2.9	4.5	0.475			6,304	71	2.2	0.8	221	1.21	7,968	65	2.1	0.7	221	1.33	8,103	163,680	38,550				
8	5.5	2.4	4.3	0.469			6,624	69	2.2	0.8	219	1.32	9,952	49	2.3	0.9	219	1.51	12,037	163,680	45,800				
9	6.3	2.8	4.4	0.463					5.0	0.8	221				4.5	0.9	221		12,037	169,416	12,750				
10	8.8	2.7	5.9	0.676					2.1	0.9	164				2.1	0.8	164		12,037	169,416	1,000				
11	6.6	4.0	5.7	0.572			5,624	64	2.3	0.8	160	1.05	8,640	53	2.3	0.6	160	1.53	6,584	130,526	32,850		120	110	<4
12	6.4	3.7	5.5	0.499			7,132	48	2.5	0.8	183	1.23	6,116	59	2.0	0.9	183	1.70	14,955	163,680	45,500		100		<4
13	9.8	2.1	5.1	0.464			7,944	48	2.3	0.6	192	1.31	8,340	52	2.0	1.0	192	1.36	6,814	166,320	27,750		72		<4
14	5.8	3.3	4.9	0.481			6,016	66	2.2	0.7	180	1.10	8,880	51	2.1	0.7	180	1.57	13,628	147,984	23,250				
15	5.8	3.3	5.2	0.400			5,776	64	2.2	0.5	193	0.91	6,436	64	2.1	1.1	193	1.25	11,025	136,476	40,050				
16	6.6	3.6	5.7	0.495					2.3	0.9	148				2.1	0.9	148		11,025	176,532	8,050				
17	6.3	3.3	5.4	0.495					2.7	0.3	173				2.3	0.5	173		11,025	165,323	0				
18	6.3	3.2	4.9	0.570			3,340	60	2.1	0.8	225	0.81	6,428	58	2.2	0.6	225	0.88	6,110	175,752	12,550		130	170	<4
19	5.7	3.3	4.6	0.463			5,480	62	2.3	0.6	201	1.11	6,684	57	2.1	0.9	201	0.88	5,925	182,244	11,000		110		<4
20	5.8	3.1	4.6	0.461			4,740	59	2.3	0.7	220	0.84	4,172	86	2.0	1.0	220	0.88	4,390	175,152	30,750		110		<4
21	6.0	3.1	4.6	0.676			5,196	62	2.5	0.7	218	1.31	5,108	59	2.9	0.6	218	1.01	6,908	140,569	15,250				
22	5.9	2.9	4.5	0.496			5,076	59	2.5	0.7	211	1.10	5,096	59	2.1	0.8	211	1.04	9,102	114,526	23,250				
23	6.1	2.8	4.5	0.451					4.2	0.4	228				4.3	1.1	228		9,102	154,116	0				
24	6.0	2.8	4.4	0.460					2.6	0.7	202				2.2	0.9	202		9,102	160,344	6,000				
25	5.3	2.8	4.3	0.469			5,932	59	2.5	0.8	221	0.87	6,428	53	2.4	1.3	221	1.01	7,996	118,738	8,500		210	130	<4
26	5.5	2.6	4.4	0.468			5,988	55	2.6	0.7	217	0.96	4,552	70	2.8	1.3	217	0.97	8,209	31,028	15,750		150		<4
27	5.8	2.9	4.6	0.463			5,732	52	2.6	0.3	210	1.03	5,276	57	5.0	1.9	210	1.06	2,934	0	19,000		130		<4
28	5.5	3.0	4.6	0.497			4,868	62	5.0	0.2	208	0.75	6,396	47	5.0	1.3	208	1.06	5,081	0	16,500				
29	6.3	3.1	4.6	0.467			4,648	71	3.6	0.6	208	0.72	5,428	57	5.0	1.0	208	0.88	4,492	0	11,750				
30	6.0	3.1	4.6	0.462					5.0	0.6	229				5.0	1.2	229		4,083	0	9,000				
31	5.8	2.7	4.6	0.477					3.5	0.6	219				4.1	1.5	219		4,083	0	5,000				
Total	190.3	93.5	147.69																246,650	3,841,129	556,350				
Ave.	6.1	3.0	4.76	0.493			5,759	62	2.8	0.6	204	1.13	6,560	62	2.9	0.9	1.06	1.20	7,956	123,907	17,947		135	133	4

	Suspended Solids			Settleable Solids	Turbidity	Chlorine Dose		Chlorine Residual		Chlorine Residual Average	Fecal Coliform	E. Coli	Ammonia			Nitrite			Nitrate			TKN		
	Inf.	Prim Eff.	Final Eff.	Eff.	Eff.			high	low				Inf.	Prim Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.
Units	mg/l			ml/l	NTU	lbs	mg/l	mg/l		mg/l	#/100ml	#/100ml	mg/l			mg/l			mg/l			mg/l		
Freq.	3/week			Wk Day	Wk Day	4/Work Day		4/work day		4/wk day	3/week	See table A of permit	3/week	Mthly	3/wk	Monthly			Monthly			Monthly		
1						0.00	0.00																	
2						0.00	0.00																	
3						0.00	0.00																	
4	250	100	<5	0.0	1.6	0.00	0.00						18.80	19.3	0.14	0.160	0.010	<0.010	<0.02	<0.02	2.490	39.60	29.40	1.200
5	260		<5	0.0	1.5	0.00	0.00						21.20		0.12	0.020		<0.010	<0.02		2.810	34.00		0.800
6	490		<5	0.0	1.7	0.00	0.00						23.50		0.13	0.240		<0.010	<0.02		2.850	42.40		1.270
7				0.0	2.0	0.00	0.00																	
8				0.0	1.4	0.00	0.00																	
9						0.00	0.00																	
10						0.00	0.00																	
11	240	77	<5	0.0	1.9	0.00	0.00						15.50		0.08	0.190		<0.010	0.35		2.530	27.40		1.140
12	240		<5	0.0	3.2	0.00	0.00						17.30		0.15	0.100		<0.010	0.38		3.070	27.80		1.330
13	120		5	0.0	2.4	0.00	0.00						16.00		0.07	0.260		<0.010	0.12		2.850	24.00		0.990
14				0.0	2.0	0.00	0.00																	
15				0.0	1.5	0.00	0.00																	
16						0.00	0.00																	
17						0.00	0.00																	
18	180	140	<5	0.0	1.4	0.00	0.00						20.40		0.09	0.030		<0.010	<0.02		3.340	30.60		1.000
19	180		<5	0.0	1.8	0.00	0.00						18.60		0.18	0.020		<0.010	<0.02		3.230	28.10		1.200
20	200		<5	0.0	1.4	0.00	0.00						19.60		0.13	0.020		<0.010	<0.02		3.290	34.60		1.300
21				0.0	1.8	0.00	0.00																	
22				0.0	1.4	0.00	0.00																	
23						0.00	0.00																	
24						0.00	0.00																	
25	310	88	<5	0.0	1.9	0.00	0.00						20.80		0.15	0.020		<0.010	<0.02		2.090	37.60		0.810
26	340		<5	0.0	1.6	0.00	0.00						21.40		0.19	0.020		<0.010	<0.02		2.840	36.20		1.260
27	190		<5	0.0	1.4	0.00	0.00						40.20		0.10	0.160		<0.010	0.04		3.030	54.60		1.330
28				0.0	2.2	0.00	0.00																	
29				0.0	1.7	0.00	0.00																	
30						0.00	0.00																	
31						0.00	0.00																	
Total																								
Ave.	250	101	5	0.0	1.8	0.00	0.00						21.11	19.3	0.13	0.103	0.010	0.010	0.09	0.02	2.868	34.74	29.40	1.136

	Total N			Total N	Low D.O.	pH		Total P			Total P	Ortho P			Temp.		Arsenic		Copper	Nickel		Selenium	
	Inf.	Prim. Eff.	Final Eff.	Eff.	Eff.	Inf.	Eff.	Inf.	Prim. Eff.	Final Eff.	Eff.	Inf.	Prim. Eff.	Final Eff.	Inf.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.	Inf.	Eff.
Units	mg/l			lb/d	mg/l	S.U.		mg/l			lb/d	mg/l			F		mg/l		mg/l	kg/day		kg/day	
Freq.	Monthly			Mthly	4/wk day	Work Day		Nov-March (Monthly) (April-October) 2/week			Apr - Oct	Nov-March (Monthly) (April - October) 2/week			Work day		Weekly		Mthly	Weekly		Weekly	
1																							
2																							
3																							
4	39.8	29.4	3.7	142	7.5	7.3	6.7	4.40		9.24	351	1.42		8.22	58	70	<0.0040	0.006	0.008	0.10	0.17	0.09	0.07
5	34.0		3.6	132	8.7	7.4	6.7			9.62	355			9.11	57	66							
6	42.7		4.1	147	8.0	7.6	6.7								57	68							
7					7.7	7.4	6.7								57	66							
8					7.9	7.6	6.8								58	70							
9																							
10																							
11	27.9		3.7	173	7.2	7.5	6.9			7.60	358			7.19	58	72	<0.0040	0.005		0.17	0.19	0.11	0.06
12	28.3		4.4	202	7.7	7.6	6.9								57	69							
13	24.4		3.8	162	7.6	7.5	6.9								60	68							
14					7.7	7.3	6.7								56	68							
15					7.6	6.5	6.7								58	71							
16																							
17																							
18	30.7		4.4	180	7.6	7.6	6.7			8.20	337			7.61	57	71	<0.0040	0.007		0.29	0.26	0.09	0.11
19	28.1		4.4	169	7.6	7.3	6.6			9.10	351			8.70	57	70							
20	34.6		4.6	176	7.8	7.3	6.6								57	68							
21					8.1	7.4	6.6								59	69							
22					8.0	6.6	6.7								61	68							
23																							
24																							
25	37.6		2.9	104	8.2	7.7	6.9			8.20	295			7.81	56	67	<0.0040	0.006		0.11	0.14	0.81	0.16
26	36.2		4.1	150	8.0	7.5	6.7			7.87	287			7.52	56	68							
27	54.8		4.4	169	8.3	7.6	6.8								56	66							
28					8.6	7.4	6.8								58	62							
29					8.9	7.6	6.9								56	61							
30																							
31																							
Total																							
Ave.	34.9	29.4	4.0	159	7.9	7.4	6.7	4.40		8.55	333	1.42		8.02	57.6	67.8	0.0040	0.0060	0.008	0.17	0.19	0.27	0.10

	Zinc		Alkalinity	
			Pri. Eff.	
	Inf.	Eff.		Eff.
Units	kg/day		mg/l	
Freq.	Weekly		Monthly	
1				
2				
3				
4	3.82	1.498	110	40
5			100	50
6			140	40
7			130	40
8			130	50
9				
10				
11	7.69	1.819	80	40
12			100	50
13			90	40
14			120	40
15			160	50
16				
17				
18	2.92	2.189	100	40
19			90	40
20			100	20
21			50	40
22			130	90
23				
24				
25	5.55	1.646	90	50
26			110	40
27			140	50
28			120	50
29			140	70
30				
31				
Total				
Ave.	5.00	1.788	112	47

Sludge Dispoal Location:

Please return forms to:

DEEP - Water Bureau

ATTN: Municipal Wastewater Monitoring Coordinator

Municipal Facilities

79 Elm Street

Statement of Acknowledgement

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

Authorized Official:

John Batorski

Title:

Plant Manager

Signature: John Batorski

Date: 2-10-16

January 2016 Sludge Data

Source	Gallons	Wet Tons
Beacon Falls	104,000	
Bedford Hills	13,000	
Bristol		513.28
Casella - Chicopee Cake		492.41
Casella - Glen Cove		263.61
Casella - Huntington		221.06
Casella - Poughkeepsie		176.27
Casella - Suffolk		1219.98
Casella - Walden		15.00
Casella - Yorktown		50.24
Cranston		152.11
Danbury Cake		97.06
Heritage Village Water	32,500	
Litchfield	32,500	
Lynwood Place	26,000	
Mahopac Sludge & Septic	155,500	
New Hartford	26,000	
New Rochelle		581.19
North Canaan	32,500	
North Haven	117,000	
Pawling	78,000	
Pepsi	6,500	
Plymouth	78,000	
Poughkeepsie	390,000	
Redding	6,500	
Rhinebeck WPCF		11.32
Ridgefield	78,000	
Seymour Cake		110.16
Southbury	130,000	
Southbury Car Wash	13,000	
Southington	546,000	
Stratford	832,000	
Synagro - Ansonia	32,500	
Synagro - Branford	52,000	
Synagro - Bridgeport East	52,000	
Synagro - Bridgeport West	266,500	
Synagro - East Windsor	6,500	
Synagro - Groton	6,500	
Synagro - Holyoke		123.73
Synagro - New Canaan	19,500	
Synagro - Newtown	6,500	
Synagro - Norwalk	58,500	41.31
Synagro - Orange County		29.43
Synagro - Pawcatuck	6,500	
Synagro - Stamford		104.47
Synagro - Wallkill		19.40
Thomaston Treatment	65,000	
Torrington	377,000	
Westport	116,091	
Windham	221,000	
Totals	3,983,091	4222.03

Nutrient Analysis Report

For compliance with General Permit for Nitrogen Discharges

Facility Name: NAUGATUCK TREATMENT Co.
Permit Number: CT0100641

Month: Jan-16
Design Flow: 10.3 MGD

Final Effluent

Plant Name	Sample Date (mm/dd/yyyy)	Average Daily Flow (mgd)	TKN (mg/l)	(Nitrite + Nitrate) (mg/l)	Total Nitrogen (mg/l)	Total Nitrogen (lbs/d)
NAUGATUCK TRE	1/4/2016	4.55	1.2	2.49	3.7	140
NAUGATUCK TRE	1/5/2016	4.42	0.8	2.81	3.6	133
NAUGATUCK TRE	1/6/2016	4.34	1.27	2.85	4.1	148
NAUGATUCK TRE	1/11/2016	5.65	1.14	2.53	3.7	174
NAUGATUCK TRE	1/12/2016	5.46	1.33	3.07	4.4	200
NAUGATUCK TRE	1/13/2016	5.09	0.99	2.85	3.8	161
NAUGATUCK TRE	1/18/2016	4.93	1	3.34	4.3	177
NAUGATUCK TRE	1/19/2016	4.62	1.2	3.23	4.4	170
NAUGATUCK TRE	1/20/2016	4.64	1.3	3.29	4.6	178
NAUGATUCK TRE	1/25/2016	4.32	0.81	2.09	2.9	104
NAUGATUCK TRE	1/26/2016	4.38	1.26	2.84	4.1	150
NAUGATUCK TRE	1/27/2016	4.61	1.33	3.03	4.4	169
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					Total Pounds	1904
					Average Pounds	158.6666667

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

Statement of Acknowledgement

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

Authorized Official: _____

Title: _____

Sent electronically 2-9-16

DMR Copy of Record

Permit

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

Report Dates & Status

Monitoring Period:	From 01/01/16 to 01/31/16	**DMR Due Date:**	02/15/16	**Status:**	NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

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

No Data Indicator (NODI)

Form NODI: --

Parameter Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Quality or Concentration Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00011	Temperature, water deg. fahrenheit	W - See Comments	0	--	Sample										=	85	15 - deg F		01/60 - Once Every 2 Months	GR - GRAB
					Permit Req.											Req Mon INST MAX	15 - deg F		01/60 - Once Every 2 Months	GR - GRAB
					Value NODI															
00056	Flow rate	1 - Effluent Gross	0	--	Sample	=	4.6	=	0.8	03 - MGD									99/99 - Continuous	TM - TOTALZ
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Continuous	TM - TOTALZ
					Value NODI															
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample						=	7.2					19 - mg/L		01/01 - Daily	GR - GRAB
					Permit Req.						>=	5 INST MIN					19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI															
00310	BOD, 5-day, 20 deg. C	T - See Comments	0	--	Sample										=	4	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample						=	6.6			=	6.9	12 - SU		01/01 - Daily	GR - GRAB
					Permit Req.						>=	6 INST MIN			<=	9 INST MAX	12 - SU		01/01 - Daily	GR - GRAB
					Value NODI															
00400	pH	G - See Comments	0	--	Sample						=	5.6			=	5.6	12 - SU		01/00 - Once Every 2 Months	GR - GRAB
					Permit Req.							Req Mon INST MIN				Req Mon INST MAX	12 - SU		01/00 - Once Every 2 Months	GR - GRAB
					Value NODI															
00400	pH	W - See Comments	0	--	Sample						=	4.1			=	4.1	12 - SU		01/00 - Once Every 2 Months	GR - GRAB
					Permit Req.							Req Mon INST MIN				Req Mon INST MAX	12 - SU		01/00 - Once Every 2 Months	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample								=	5	=	5	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.								<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00530	Solids, total suspended	G - Raw Sewage Influent	0	--	Sample								=	250			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.									Req Mon MO AVG			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00530	Solids, total suspended	T - See Comments	0	--	Sample										=	5	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	4	--	Sample								=	0.13			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.								<=	25 MO AVG			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00610	Nitrogen, ammonia total [as N]	T - See Comments	0	--	Sample										=	0.11	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00615	Nitrogen, nitrite total [as N]	T - See Comments	0	--	Sample										=	0.01	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00620	Nitrogen, nitrate total [as N]	T - See Comments	0	--	Sample										=	2.67	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00665	Phosphorus, total [as P]	T - See Comments	0	--	Sample										=	9.31	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															
00720	Cyanide, total [as CN]	T - See Comments	0	--	Sample										=	0.01	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/00 - Quarterly	CP - COMPOS
					Value NODI															

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00722 Cyanide, free [amen. to chlorination]	T - See Comments	0	--	Sample					=	0.01	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01002 Arsenic, total [as As]	1 - Effluent Gross	0	--	Sample				=	0.006	0.007	19 - mg/L	01/07 - Weekly	CP - COMPOS		
				Permit Req.					Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/07 - Weekly	CP - COMPOS		
				Value NODI											
01002 Arsenic, total [as As]	Q - Raw Sewage Influent	0	--	Sample						0.004	19 - mg/L	01/07 - Weekly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/07 - Weekly	CP - COMPOS		
				Value NODI											
01002 Arsenic, total [as As]	S - See Comments	0	--	Sample						3.2	39 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	39 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01002 Arsenic, total [as As]	T - See Comments	0	--	Sample						0.006	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01002 Arsenic, total [as As]	W - See Comments	0	--	Sample						0.07	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01012 Beryllium, total [as Be]	S - See Comments	0	--	Sample						0.5	39 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	39 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01012 Beryllium, total [as Be]	T - See Comments	0	--	Sample						0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01012 Beryllium, total [as Be]	W - See Comments	0	--	Sample						0	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01027 Cadmium, total [as Cd]	T - See Comments	0	--	Sample						0.0001	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01027 Cadmium, total [as Cd]	W - See Comments	0	--	Sample						0.01	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01032 Chromium, hexavalent [as Cr]	T - See Comments	0	--	Sample						0.01	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01034 Chromium, total [as Cr]	T - See Comments	0	--	Sample						0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01034 Chromium, total [as Cr]	W - See Comments	0	--	Sample						0.02	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01042 Copper, total [as Cu]	1 - Effluent Gross	0	--	Sample				=	0.008	0.008	19 - mg/L	01/30 - Monthly	CP - COMPOS		
				Permit Req.					Req Mon MO AVG	Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS		
				Value NODI											
01042 Copper, total [as Cu]	T - See Comments	0	--	Sample						0.009	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01042 Copper, total [as Cu]	W - See Comments	0	--	Sample						2.65	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01045 Iron, total [as Fe]	T - See Comments	0	--	Sample						0.04	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01045 Iron, total [as Fe]	W - See Comments	0	--	Sample						8.07	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01051 Lead, total [as Pb]	T - See Comments	0	--	Sample						0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01051 Lead, total [as Pb]	W - See Comments	0	--	Sample						0.09	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Permit Req.						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB		
				Value NODI											
01059 Thallium, total [as Tl]	T - See Comments	0	--	Sample						0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Value NODI											
01067 Nickel, total [as Ni]	1 - Effluent Gross	0	--	Sample	=	0.19	=	0.26	01 - kg/d			01/07 - Weekly	CP - COMPOS		
				Permit Req.	<=	2.14 MO AVG	<=	3.84 DAILY MX	01 - kg/d			01/07 - Weekly	CP - COMPOS		
				Value NODI											
01067 Nickel, total [as Ni]	Q - Raw Sewage Influent	0	--	Sample			=	0.29	01 - kg/d			01/07 - Weekly	CP - COMPOS		
				Permit Req.				Req Mon DAILY MX	01 - kg/d			01/07 - Weekly	CP - COMPOS		
				Value NODI											
01067 Nickel, total [as Ni]	T - See Comments	0	--	Sample						0.011	19 - mg/L	01/90 - Quarterly	CP - COMPOS		
				Permit Req.						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS		

				Value NODI													
				Sample													
01067 Nickel, total [as Ni]	W - See Comments	0	--	Permit Req.													
				Value NODI													
				Sample													
01077 Silver, total [as Ag]	T - See Comments	0	--	Permit Req.													
				Value NODI													
				Sample =	1.766	=	2.189	01 - kg/d					=	0.06	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
01092 Zinc, total [as Zn]	1 - Effluent Gross	0	--	Permit Req. <=	3.79 MO AVG	<=	5.68 DAILY MX	01 - kg/d						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample		=	7.69	01 - kg/d					=	0.001	19 - mg/L	01/90 - Quarterly	CP - COMPOS
01092 Zinc, total [as Zn]	G - Raw Sewage Influent	0	--	Permit Req.			Req Mon DAILY MX	01 - kg/d						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample												01/07 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	T - See Comments	0	--	Permit Req.												01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample												01/07 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	W - See Comments	0	--	Permit Req.												01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample									=	0.09	19 - mg/L	01/90 - Quarterly	CP - COMPOS
01097 Antimony, total [as Sb]	T - See Comments	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample									=	4.91	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
01105 Aluminum, total [as Al]	T - See Comments	0	--	Permit Req.										Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	0.01	19 - mg/L	01/90 - Quarterly	CP - COMPOS
01105 Aluminum, total [as Al]	W - See Comments	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample =	0.1	=	0.16	01 - kg/d					=	0.07	19 - mg/L	01/90 - Quarterly	CP - COMPOS
01147 Selenium, total [as Se]	1 - Effluent Gross	0	--	Permit Req. <=	35 MO AVG	<=	75 DAILY MX	01 - kg/d						Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample =	0.27			01 - kg/d					=	10.8	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
01147 Selenium, total [as Se]	G - Raw Sewage Influent	0	--	Permit Req.	Req Mon MO AVG			01 - kg/d						Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample												01/07 - Weekly	CP - COMPOS
01147 Selenium, total [as Se]	S - See Comments	0	--	Permit Req.												01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample												01/07 - Weekly	CP - COMPOS
01147 Selenium, total [as Se]	T - See Comments	0	--	Permit Req.												01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample									=	5.9	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
01147 Selenium, total [as Se]	W - See Comments	0	--	Permit Req.										Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	0	19 - mg/L	01/90 - Quarterly	CP - COMPOS
39510 Polychlorinated biphenyls [PCBs]	S - See Comments	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample									=	0.2	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
46000 Phenols	T - See Comments	0	--	Permit Req.										Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample										Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
50060 Chlorine, total residual	T - See Comments	0	--	Permit Req.										B - Below Detection Limit/No Detection			
				Value NODI									=	0.02	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Sample					=	21.7				Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
70316 Solids, total, percent	S - See Comments	0	--	Permit Req.						Req Mon INST MIN			=	0.02	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Sample					=	16.4					23 - %	01/60 - Once Every 2 Months	GR - GRAB
70319 Solids, fixed, % of total solids	S - See Comments	0	--	Permit Req.						Req Mon INST MIN					23 - %	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											23 - %	01/60 - Once Every 2 Months	GR - GRAB
				Sample					=	83.5					23 - %	01/60 - Once Every 2 Months	GR - GRAB
70322 Solids, volatile % of total solids	S - See Comments	0	--	Permit Req.						Req Mon INST MIN					23 - %	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	0.0002	19 - mg/L	01/90 - Quarterly	CP - COMPOS
71900 Mercury, total [as Hg]	T - See Comments	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI													
				Sample									=	0.0011	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
71900 Mercury, total [as Hg]	W - See Comments	0	--	Permit Req.										Req Mon INST MAX	19 - mg/L	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	733	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78457 Zinc, dry weight	S - See Comments	0	--	Permit Req.										Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	50.6	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78468 Lead, dry weight	S - See Comments	0	--	Permit Req.										Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									=	27	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB

78469 Nickel, dry weight	S - See Comments	0	--	Permit Req.								Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
				Sample							=	0.71	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78471 Mercury, dry weight	S - See Comments	0	--	Permit Req.								Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
				Sample							=	43.3	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78473 Chromium, dry weight	S - See Comments	0	--	Permit Req.								Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
				Sample							=	606	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78475 Copper, sludge, tot, dry weight [as Cu]	S - See Comments	0	--	Permit Req.								Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
				Sample							=	1.68	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78476 Cadmium, sludge, tot dry weight [as Cd]	S - See Comments	0	--	Permit Req.								Req Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
				Sample				=	4	=	4		19 - mg/L	03/07 - Three Per Week	CP - COMPOS
80126 BOD, carbonaceous [5 day, 5 C]	1 - Effluent Gross	0	--	Permit Req.				<=	25 MO AVG	<=	40 DAILY MX		19 - mg/L	03/07 - Three Per Week	CP - COMPOS
				Value NODI											
				Sample				=	135				19 - mg/L	03/07 - Three Per Week	CP - COMPOS
80126 BOD, carbonaceous [5 day, 5 C]	G - Raw Sewage Influent	0	--	Permit Req.					Req Mon MO AVG				19 - mg/L	03/07 - Three Per Week	CP - COMPOS
				Value NODI											
				Sample							=	4	19 - mg/L	01/90 - Quarterly	CP - COMPOS
80126 BOD, carbonaceous [5 day, 5 C]	T - See Comments	0	--	Permit Req.								Req Mon DAILY MX	19 - mg/L	01/90 - Quarterly	CP - COMPOS
				Value NODI											
				Sample	=	98							23 - %	03/07 - Three Per Week	CA - CALCTD
81011 Solids, suspended percent removal	K - Percent Removal	0	--	Permit Req.	>=	85 MN % RMV							23 - %	03/07 - Three Per Week	CA - CALCTD
				Value NODI											
				Sample	=	97							23 - %	03/07 - Three Per Week	CA - CALCTD
81383 Carbonaceous oxygen demand, % removal	K - Percent Removal	0	--	Permit Req.	>=	85 MN % RMV							23 - %	03/07 - Three Per Week	CA - CALCTD
				Value NODI											
				Sample	=	100							2T - % survival	01/90 - Quarterly	CP - COMPOS
TDA3D Noael Static 48Hr Acute D. Pulex	T - See Comments	0	--	Permit Req.	>=	90 MINIMUM							2T - % survival	01/90 - Quarterly	CP - COMPOS
				Value NODI											
				Sample	=	100							2T - % survival	01/90 - Quarterly	CP - COMPOS
TDA8C Noael Static 48Hr Acute Pimephales	T - See Comments	0	--	Permit Req.	>=	90 MINIMUM							2T - % survival	01/90 - Quarterly	CP - COMPOS
				Value NODI											

Submission Note

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

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

NAUGATUCK WPCF

User: John.Batorski@Veoliawaterna.com

Name: John Batorski

E-Mail: John.Batorski@Veoliawaterna.com

Date/Time: 2016-02-08 13:54 (Time Zone: -05:00)

VEOLIA
WATER

Sent Certified R.R.R. mail #7014 1200 0002 2236 9937 on February 3, 2016

Mr. Craig Motasky
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

February 3, 2016

Re: Operator Updates

Dear Mr. Motasky:

There have been some staff changes at the Naugatuck WPCF. The updates are attached along with an updated Chief, Shift and Process Control Operator Verification Form is attached.

Please contact me if you have any questions.

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski

John Batorski
Plant Manager

Enclosure: Chief, Shift and Process Control Operator Verification Form
Operator List

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

State of Connecticut
Department of Environmental Protection
Bureau of Water Protection and Land Reuse

Chief, Shift, and Process Control Operator Verification Form

Please complete one copy of this form for each wastewater treatment facility in your municipality

		1st Shift	2nd Shift	3rd Shift	Other
FACILITY INFORMATION	Facility Name: Naugatuck WPCF				
	Municipality				
	Supervisory Personnel at Facility	3			
	Operations Personnel at Facility	6	3	3	
	Maintenance Personnel at Facility	5			
	Administrative and Clerical Personnel at Facility	3.5			
	Total Personnel on Shift	17.5	3	3	

CHIEF OPERATOR

Name: John Batorski — Cert No: 1072 — Classification: (circle one) II, III, IIIG, (IV), IVG

Date appointed Chief Operator: 7-21-08

Notes or Comments:

SHIFT OPERATOR

Name: Chris Makuch — Cert No: 1982 — Classification: (circle one) II, III, IIIG, (IV), IVG — What Shift?:

Date appointed Shift Operator: 12-21-09

Does this operator have the authority to make process control changes? Yes

How many people does this operator supervise? All operations and collections staff

What are the operator's responsibilities on this shift? Plant/Incinerator operation. There are 2 Collection System certified personnel.

SHIFT OPERATOR

Name: — Cert No: — Classification: (circle one) II, III, IIIG, IV, IVG — What Shift?:

Date appointed Shift Operator:

Does this operator have the authority to make process control changes?

How many people does this operator supervise?

What are the operator's responsibilities on this shift?

SHIFT OPERATOR

Name: — Cert No: — Classification: (circle one) II, III, IIIG, IV, IVG — What Shift?:

Date appointed Shift Operator:

Does this operator have the authority to make process control changes?

How many people does this operator supervise?

What are the operator's responsibilities on this shift?

PROCESS CONTROL OPERATOR

Name: #2361 cert. Rafal Gaciarz / #1430 cert. Tom Deller — Cert No: — Classification: (circle one) II, (III), IIIG, IV, IVG — Each person has Grade III — What Shift?: First

Date appointed Process Control Operator: See below

Does this operator have the authority to make process control changes? Yes

How many people does this operator supervise? Up to 5 on first shift

What are the operator's responsibilities on this shift? Plant Operations, lab, incinerator

Tom Deller 8-25-11 was process control operator start. Rafal started 8-29-13 as process control operator

I hereby certify that the information supplied above contains no willful misrepresentations or falsifications, and that the information is true and complete to the best of my knowledge and belief.

Signed [signature] 2-3-16
Chief Operator — Date

Signed _____
Chief Elected Municipal Official — Date

Submission of information requested by this form is required by Section 22a-416-6(a)(1) of the Regulations of Connecticut State Agencies.

Naugatuck WWTP Staff Certifications

	Employee	Title	Start Date	Certificate Type
1	Azzarito, Michael	Operator 1	8/27/2012	Class 1 Wastewater (Jan 2014)
2	Carpentier,John M	Maint Lead, licensed electrician	2/9/2009	Collections System Grade 3
3	Deller,Thomas A *	Lead Operator	8/29/1988	Class 3 Wastewater Cert #1430
4	Fitzgerald, Paul	Operator in Training	6/24/2015	OIT designation Jan 26, 2015
5	Flannery, Bryan	Operator 1	7/23/2012	Class 1 Wastewater Cert #2399
6	Forish, Michael	Coll Operator 2	2/14/2011	Coll Sys Grade 2, passed Grade 1 wastewater exam (Jan 2016)
7	Gaciarz, Rafal *	Operator 3	7/5/2011	Class 3 Wastewater Cert #2361
8	Grosso, James	Maint. Mech III, licensed electrician	4/28/2014	will take next collections test
9	Howard, Brian	Coll Operator 1	9/11/2013	Collections System Grade 1
10	Little, Patrick	Operator 1	2/6/2012	Class 1 Wastewater Cert #2403
11	Martins, Brian	Maint. Mech III, licensed plumber	1/26/2015	will take next collections test
12	Nunes, Jose	Operator 2	6/6/1988	Class 2 Wastewater Cert #1391
13	Rebimbas,Francisco J	Operator 2	2/3/2003	Class 2 Wastewater Cert #2219
14	Ricardo, Rivera	Operator in Training	2/23/2016	OIT designation Aug 2013
15	Sargeant, Christopher	Operator in Training	2/15/2016	Class 1 Wastewater Cert #2442
16	Tomarelli, Michael	Maint. Mech III, licensed electrician	10/28/2013	will take next collections test
17	Yontef,Andre	Operator 1	9/9/2013	Class 1 Wastewater (Jan 2014)
18	Young,Harry D	Operator 2	3/17/1989	Class 2 Wastewater Cert #1297
19	Verlezza, Natalie [1]	Plant Engineer (BS degree)	5/18/2015	passed Grade 1 wastewater exam (Jan 2016)

Jackson, Shelby — resigned, in Jan 2016 believe he is at Wallingford, CT facility (Water Treatment)

Burke, Eugene — transferred to the Redding, CT facility

Bernardini. Matthew — will transfer to Redding facility Feb 8, 2016

* Process Control Operators

[1] Plant Engineer

VEOLIA
WATER

Sent Certified R.R.R. mail #7014 1200 0002 2237 0094 on January 29, 2016

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

January 29, 2016

Re: Aquatic Toxicity Monitoring Report, 1st Quarter 2016

To Whom It May Concern:

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

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski

John Batorski
Plant Manager

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

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

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

Aquatic Toxicity Monitoring Report (ATMR)
Instruction Form -Municipal

Client Name/Project: Phoenix - Veolia Naugatuck Test Date: 1-8-16

Sample ID: BK 49395

New England Bioassay
a Division of GZA GeoEnvironmental, Inc.

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

Your results were as follows:

☒ Pass

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

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

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

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

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

Please detach this instruction form and the Chain-of-Custody and keep for your records. File the complete ATMR as follows:

- The complete ATMR (Parts 1, 2, 2S and 3) must be sent to the Bureau of Water Management at the following address:

  ATTN: Municipal Wastewater Monitoring Coordinator
  Connecticut Department of Energy and Environmental Protection
  Bureau of Water Protection and Land Reuse, Planning Standards Division
  79 Elm St.
  Hartford, CT 06106-5127

- The results of chemical analyses (copied from the ATMR Part 3) and aquatic toxicity tests (Pass or Fail, not % survival) must be entered on the Discharge Monitoring Report (DMR), and the DMR must be received at the above address.

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

NEW ENGLAND BIOASSAY
ATMR COVER SHEET

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

***D.pulex* TEST ID #:** 16-24a
***P.promelas* TEST ID #:** 16-24b
COC #: C36-1043
PROJECT #: 05.0044745.00

SAMPLE: Naugatuck WPCF

RECEIVED ON: 1/8/16

LABORATORY CONTROL WATER

NEB Lot #:	A36-S001	SRCF
Hardness:	48	mg/L as $CaCO_3$
Alkalinity:	35	mg/L as $CaCO_3$

SAMPLE COLLECTION INFORMATION

DATE(s): 1/5/16 -- 1/6/16
TIME(s): 12am -- ~~0000-2400~~ 1103am

INITIAL CHEMISTRY DATA				TECHNICIAN INITIALS:	PD
Color	light yellow	Temp. (°C)	3.2	Hardness (mg/L)	146
Cond. (µmhos/cm)	836	D.O.(mg/L)	10.2	Alkalinity (mg/L)	40
Salinity (ppt)	< 1	pH (su)	6.5	TRC (mg/L)	<0.02

INVERTEBRATE

Test Set Up Technician Initials: CW
Test Type: Screen
Test Species: *Daphnia pulex*
Source: New England Bioassay
NEB Lot#: Dp16(1-8)
Age: < 24 Hours
Test Solution Volume: 30 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 1/8/16 AT 1229
END DATE: 1/10/16 AT 1153

VERTEBRATE

Test Set Up Technician Initials: CW
Test Type: Screen
Test Species: *Pimephales promelas*
Source: New England Bioassay
NEB Lot#: Pp15(12-25) 1445
Age: 14 (1-14)Days
Test Solution Volume: 700 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 1/8/16 AT 1224
END DATE: 1/10/16 AT 1150

TEST SET UP CONDUCTIVITIES

D.p Control	180	µmhos/cm	*P.p* Control	180	µmhos/cm
100%	820	µmhos/cm	100%	820	µmhos/cm

RESULTS OF *Daphnia pulex* Screening Test

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

RESULTS OF *Pimephales promelas* Screening Test

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

COMMENTS:

REVIEWED BY: [signature] DATE: 1/20/16

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Receiving Water:	Naugatuck River	Waterbody ID:	6900

Sample Collection Date (s): 1/5/16 -- 1/6/16

Sample Collection Time (s): 1:12 am -- ~~0000-2400~~ 1:03 am

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% SURVIVAL)

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

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

EFFLUENT SAMPLE RESULTS (MEAN % SURVIVAL)

TEST SPECIES	100% Effluent
Daphnia pulex	100
Pimephales promelas	100

For Official Use Only

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

STATEMENT OF ACKNOWLEDGEMENT

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

Authorized Official: John Bartosek Title: Plant Manager

Signature: John Bartosek Date: 1-29-16

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Dilution Water:	Soft Reconstituted Freshwater (SRCF)	Hardness:	50 ± 5
Sample Collected On:	1/6/16 (date)	Sample Received On:	1/8/16 (date)

Test Species:	*Daphnia pulex*	Source:	New England Bioassay	Age:	<24 hours
Test Duration:	48 hours	Beginning:	1229	On:	1/8/16 (date)
		Ending:	1153	On:	1/10/16 (date)

Effluent Dilution (%)	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (SU)		
Tech Initials	CW	KO	KO	CW	KO	KO	CW	KO	KO	CW	KO	KO
Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	10	10.2	9.3	8.9	20	20	20	6.7	7.6	7.6
100% B	10	10	10			8.8			21			7.6
100% C	10	10	10			8.6			21			7.6
100% D	10	10	10			8.6			21			7.7
100% E	10	10	10			8.6			20			7.7
Control 1	10	10	10	9.4	9.5	9.0	19	20	20	7.2	7.2	7.9
Control 2	10	10	10			9.0			20			7.9
Control 3	10	10	10			8.9			20			7.8

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

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC50
Daphnia pulex	1/4/16	Copper Nitrate Lot #015-0128-016	NEB	2.15 µg/L

COMMENTS

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

STATEMENT OF ACKNOWLEDGEMENT

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

Laboratory Official:	Kimberly Wills New England Bioassay	Title:	Laboratory Manager
Signature:	Wills	Date:	1/26/16

AQUATIC TOXICITY MONITORING REPORT (ATMR) - PART 2

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Dilution Water:	Soft Reconstituted Freshwater (SRCF)	Hardness:	50 ± 5
Sample Collected On:	1/6/16 (date)	Sample Received On:	1/8/16 (date)

Test Species:	*Pimephales promelas*	Source:	New England Bioassay	Age:	14 (days)
Test Duration:	48 hours	Beginning:	1224	On:	1/8/16 (date)
		Ending:	1150	On:	1/10/16 (date)

Effluent Dilution (%)	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (SU)		
Tech Initials	CW	KO	KO	CW	KO	KO	CW	KO	Ko	CW	KO	KO
Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	10	10.2	8.8	8.3	20	19	20	6.7	7.3	7.4
100% B	10	10	10		8.4	8.2		20	20		7.2	7.4
100% C	10	10	10		8.3	8.0		20	20		7.2	7.4
100% D	10	10	10		8.3	7.9		20	20		7.2	7.4
100% E	10	10	10		8.3	8.0		20	20		7.2	7.4
Control 1	10	10	10	9.4	9.4	8.5	19	19	20	7.2	7.6	7.5
Control 2	10	10	10		9.0	8.3		19	20		7.6	7.5
Control 3	10	10	10		8.9	8.4		19	20		7.8	7.5

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

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC50
Pimephales promelas	1/4/16	Copper Nitrate Lot #015-0128-016	NEB	82.2 µg/L

COMMENTS

STATEMENT OF ACKNOWLEDGEMENT

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

Laboratory Official:	Kimberly Wills New England Bioassay	Title:	Laboratory Manager
Signature:		Date:	1/20/16

SUPPLEMENTAL CHEMISTRY (PART 2S)

Facility Name:	Borough of Naugatuck WPCF	NPDES ID:	CT0100641 DSN-001-1
Receiving Water:	Naugatuck River	Waterbody ID:	6900
Sample Collection Date(s):	1/5/16 - 1/6/16		
Sample Collection Time(s):	1:12 AM - ~~0000-2400~~ 1:03 am		

Effluent Sample At Arrival

Parameter		Effluent Sample
	Tech Initials	PD
	Date & Time	1/8/16 @ 1055
Temperature (° C)		3.2
pH (standard units)		6.5
Alkalinity (mg/L)		40
Conductivity (µS)		836
Hardness(mg/L)/Salinity (ppt)		146 / <1
Color		light yellow
TRC (mg/L)		<0.02

100% Test Sample

Parameter		*Daphnia pulex*		*Pimephales promelas*	
	Hours	Initial (00)	Final (48)	Initial (00)	Final (48)
Tech Initials		PD	KO	PD	KO
Conductivity (µS)		820	815	820	830
Alkalinity (mg/L)		40	40	40	40
Hardness (mg/L)/Salinity (ppt)		146 / <1	124 * / <1	146 / <1	126 / <1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

*Checked twice

0% Test Sample (Control)

Parameter		*Daphnia pulex*		*Pimephales promelas*	
	Hours	Initial (00)	Final (48)	Initial (00)	Final (48)
Tech Initials		PD	KO	PD	KO
Conductivity (µS)		180	179	180	192
Alkalinity (mg/L)		35	30	35	35
Hardness (mg/L)/Salinity (ppt)		48 / <1	48 / <1	48 / <1	50 / <1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

Laboratory Name/Official: Kimberly Wills, New England Bioassay

Title: Laboratory Manager

Signature: [signature]

Date: 1/26/16

49395

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

NPDES Permit:	CT0100641	Exp:	~~8/7/06~~ 8/20/2019 John Batorsk	Phone¹:	(203) 723-1433
Facility:	Naugatuck WPCF	Contact:	~~James McGrath~~	Phone²:	
Address:	500 Cherry Street	Town:	Naugatuck	Zip:	06770

STATEMENT OF ACKNOWLEDGEMENT

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

Authorized Official:	John Batorski	Title:	Plant Manager
Signature:	John Batorski	Date:	1-29-16

Sample Date: 1-6-16 Sample Day's Flow: 4.34 JAN APR JUL OCT (Circle one)

REPEAT MONTH:

FREQUENCY	MONLOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	BOD, 5 DAY		<4.0
Each Test	001 T	mg/L	SUSPENDED SOLIDS, TOTAL		<5.0
Each Test	001 T	mg/L	AMMONIA, Total		0.11
Each Test	001 T	mg/L	NITRITE, as N		<0.01
Each Test	001 T	mg/L	NITRATE, as N		2.87
Each Test	001 T	mg/L	CYANIDE, Total		<0.01
Each Test	001 T	mg/L	CYANIDE, Amenable		<0.01
Each Test	001 T	mg/L	BERYLLIUM, Total	0.001 mg/L	<0.001
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	0.006
Each Test	001 T	mg/L	CADMIUM, Total	0.0005 mg/L	<0.0001
Each Test	001 T	mg/L	CHROMIUM, Hexavalent		<0.01

Aquatic Toxicity Monitoring Report - PART 3

FREQUENCY	MONLOC	UNITS	PARAMETER	MINIMUM LEVEL	RESULT
Each Test	001 T	mg/L	CHROMIUM, Total		<0.001
Each Test	001 T	mg/L	COPPER, Total	0.005 mg/L	0.009
Each Test	001 T	mg/L	LEAD, Total	0.005 mg/L	<0.001
Each Test	001 T	mg/L	THALLIUM, Total	0.005 mg/L	<0.001
Each Test	001 T	mg/L	NICKEL, Total		0.011
Each Test	001 T	mg/L	SILVER, Total	0.002 mg/L	<0.001
Each Test	001 T	mg/L	ZINC, Total	0.020 mg/L	0.089
Each Test	001 T	mg/L	ANTIMONY, Total		<0.005
Each Test	001 T	mg/L	SELENIUM, Total	0.005 mg/L	0.003
Each Test	001 T	mg/L	PHENOLS		<0.015
Each Test	001 T	mg/L	MERCURY, Total	0.0002 mg/L	<0.0002

Testing Laboratory: Phoenix Environmental Signature: [signature] Date: 1-26-2016

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex* TGA3D

AQUATIC TOXICITY: *Pimephales promelas* TGA6C

Naugatuck WPCF

Coolant: IPK ☐ ICE ☐ No ☐

Temp °C Pg of

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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

Data Delivery:
☐ Fax #:
☐ Email:

Customer: DEEP
Address:

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

Project P.O:

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature ______ Date: ______

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

Analysis Request: Toxicity - see below

Bottle columns: Soil VOA Vials [ ] methanol [ ] H2O; GL Soil container [ ] 1oz [ ] 1oz; 40 ml VOA Vial [ ] As Is [ ] HCl; GL Amber 1000ml [ ] As Is [ ] H2SO4; PL As Is [ ] 250ml [ ] 500ml [ ] 1000ml; PL H2SO4 [ ] 250ml [ ] 500ml; PL HNO3 250ml; PL NaOH 250ml; Bacteria (as is); Bacteria (w/thio)

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Toxicity - see below		Soil VOA Vials
BK49405	West Haven	WW	1-7-16	—	X	C36-1043	*
BK49395	Veolia Naugatuck		1-7-16	—	X	C36-1042	*

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	1-7-16	0800
[signature]	[signature]	1-7-16	1055

dates incorrect! should be 1/8/16 mq

Comments, Special Requirements or Regulations:
* Daphnia Pulex
Pimephales Promelas

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

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

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

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

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

* SURCHARGE APPLIES

State where samples were collected: ______

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

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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

Temp 1 °C Pg of

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

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

Project: Naugatuck
Report to: Tom Deller
Invoice to: 1st Qtr 2016 ATMR
Phone #: 203-723-1433 ext 2004
Fax #: 203-723-8539

Project P.O: 1st Qtr 2016 ATMR

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification
Sampler's Signature: R GACIARZ Date: 1/7/16

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

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Aquatic Toxicity	Aluminum, Antimony, Arsenic, Beryllium	BOD5, CBOD5, Cadmium, Hex Chromium	Chromium, Total CL2 Residual	Copper, Cyanide, Ammonia	Cyanide, Total	Iron, Lead, Mercury, Nickel, NH3, NO2	NO3, Phenols, Total Phosphorus	Selenium, Silver, TSS, Thallium	Zinc, NOAEC, Static 48hr Acute D Pulex	NOAEC, Static 48hr Acute Pimephales		Cuba	GL Soil container ( )	GL Soil container ( )	40 ml VOA Vial ( )	GL Amber 1000ml ( ) As is ( )	1 oz	1 oz	PL As is ( ) 250ml (X) As Is (X) HCl	PL H2SO4 (X) 500ml (X) H2SO4	PL HNO3 250ml (X) 500ml	PL NaOH 250ml	Bacteria Bottle
49395	Effluent	WW	1/6/2016	24hr	X	X	X	X	X	X	X	X	X	X	X			X				X	X	X	X	X		

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	2016/1/7	11:59
[signature]	[signature]	1-7-16	14:34

Comments, Special Requirements or Regulations:

1st Qtr 2016 ATMR

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

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

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

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

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

State where samples were collected: CT

VEOLIA

Sent via certified mail #7014 1200 0002 2237 0025 on January 14, 2016

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

January 14, 2016

Re: Sludge Monitoring Certification

Dear Sir/Madam:

Section 9: Regional Municipal Sludge Incinerator Facilities, part (A), 3 of Permit 0100641 requires an annual report regarding sludge monitoring. Last year Wright Pierce Engineers was retained to review the sludge monitoring procedures relative to permit compliance. A copy of their report was submitted last year. Attached for reference are the first 4 pages of that report. That report documented the procedures used to demonstrate permit compliance regarding sludge monitoring.

Included in this report are annual statements of compliance, certification (in state and out of state generators), a copy of the 40 CFR 503 Report, and a spreadsheet summary of the sludge monitoring records. The sludge monitoring spreadsheet is constantly updated to demonstrate compliance. In addition, a copy of the most recent sludge source list is also included. That report is submitted each month with the MOR.

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

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

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

VEOLIA

STATEMENT OF CERTIFICATION

I certify 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.

Signed,

1-14-16

VEOLIA WATER

Date

John Batorski, Project Manager

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

VEOLIA

STATEMENT OF COMPLIANCE

I certify that all generators of commercial and industrial (non-domestic) wastewater sludge accepted for incineration have complied with the following requirements:

"For accepted non-domestic wastewater sludges for incineration, include a copy of the generator's current active individual wastewater discharge permit issued by DEEP under Section 22a-430 of the Connecticut General Statutes (CGS); or if eligible under DEEP's general permit program (Section 22a-430b CGS), include generator's copy of that permit and, if required, the associated registration; or include the generator's copy of any pertinent emergency or temporary authorization issued by the Commissioner pursuant to Section 22a-6k CGS."

Signed,

1-14-16

VEOLIA WATER Date

John Batorski, Project Manager

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

VEOLIA

STATEMENT OF CERTIFICATION – OUT-OF-STATE GENERATORS

I certify that all new out-of-state sludge generators have been screened for acceptance in accordance with the approved protocol.

Signed,

John Batorski 1-14-16

VEOLIA WATER Date

John Batorski, Project Manager

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

VEOLIA

STATEMENT OF CERTIFICATION – SLUDGE MONITORING

I certify that Veolia North America has monitored out-of-state municipal POTW sewage sludge and privately owned domestic sewage sludge in accordance with the permit requirements.

I certify that Veolia North America has ensured that contributing generators of all out-of-state municipal POTW sewage sludge and privately owned domestic sewage sludge to monitor its wastewater sludge in accordance with the permit requirements.

Signed,

1-14-16

VEOLIA WATER

Date

John Batorski, Project Manager

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

IN STATE - ANNUAL

12/22/2015

ANNUAL RECORDS	DATE ON FILE	CURRENT	PERMIT	DESCR	ACTIVE	NOTES
ALSTOM POWER	NONE	N	Y	N/A	N	
BEACON FALLS	01-2015	Y	N/A	N/A	Y	
BOEHRINGER INGELHEIM	01-2014	N	N	N/A	N	
BRISTOL	03-2015	Y	N/A	N/A	Y	
FAIRFIELD	11-2015	Y	N/A	N/A	Y	
H I STONE- SOUTHBURY CAR	01-2015	Y	Y	N/A	Y	
HERITAGE VILLAGE WATER	08-2015	Y	N/A	N/A	Y	
LITCHFIELD	03-2015	Y	N/A	N/A	Y	
NEW HARTFORD	08-2015	Y	N/A	N/A	Y	
NORTH CANAAN	02-2015	Y	N/A	N/A	Y	
PLAINVILLE	04-2015	Y	N/A	N/A	Y	
PLYMOUTH	10-2015	Y	N/A	N/A	Y	
SALISBURY	06-2015	Y	N/A	N/A	Y	
SOUTHERN CT GAS	07-2015	Y	N/A	N/A	Y	
SOUTHINGTON	12-2015	Y	N/A	N/A	Y	
STRATFORD	05-2015	Y	N/A	N/A	Y	
SYNAGRO ANSONIA	04-2015	Y	N/A	N/A	Y	
SYNAGRO BRANFORD	03-2015	Y	N/A	N/A	Y	
SYNAGRO BPT EAST	03-2015	Y	N/A	N/A	Y	
SYNAGRO BPT WEST	03-2015	Y	N/A	N/A	Y	
SYNAGRO EAST WINDSOR	02-2015	Y	N/A	N/A	Y	
SYNAGRO GREENWICH	01-2015	Y	N/A	N/A	Y	
SYNAGRO GROTON	04-2015	Y	N/A	N/A	Y	
SYNAGRO MYSTIC	01-2015	Y	N/A	N/A	Y	

SYNAGRO NEW CANAAN	04-2015	Y	N/A	N/A	Y	
SYNAGRO NEWTOWN	04-2015	Y	N/A	N/A	Y	
SYNAGRO NORWALK	03-2015	Y	N/A	N/A	Y	
SYNAGRO PAWCATUCK	01-2015	Y	N/A	N/A	Y	
SYNAGRO RIDGEFIELD	03-2015	Y	N/A	N/A	Y	
SYNAGRO SHELTON	Exp. 01-2014	N	N/A	N/A	N	
SYNAGRO STAMFORD	09-2015	Y	N/A	N/A	Y	
SYNAGRO STONINGTON	01-2015	Y	N/A	N/A	Y	
THOMASTON TREATMENT	10-2015	Y	N/A	N/A	Y	
TORRINGTON	06-2015	Y	N/A	N/A	Y	
VES AHLSTROM LATEX	Exp. 01-2014	N	Y	N/A	N	NEED PROFILE WHEN ACTIVE
VES AM STYRENICS-RAIL WASH	03-2015	Y	Y	N/A	Y	
VES DANBURY	11-2015	Y	N/A	N/A	Y	
VES NEW LONDON	10-2015	Y	N/A	N/A	Y	
VES NORTH HAVEN	09-2015	Y	N/A	N/A	Y	
VES PPL	NONE	N	N	N/A	N	NEED PROFILE WHEN ACTIVE
VES REDDING	07-2015	Y	N/A	N/A	Y	
VES SEYMOUR	11-2015	Y	N/A	N/A	Y	
VES SHEFFIELD	NONE	N	N	N/A	N	HAVE PROFILE
VES SOUTHBURY	04-2015	Y	N/A	N/A	Y	
VES STYRON	06-2014	N	N	N/A	N	NEED PROFILE WHEN ACTIVE
WESTPORT	03-2015	Y	N/A	N/A	Y	
WINDHAM	03-2015	Y	N/A	N/A	Y	

4TH QTR. 2015 12/11/2015

ORIGINATOR-QUARTERLY REQ'D	DATE ON FILE	CURRENT	PERMIT	DESCR	ACTIVE	NOTES
CASELLA BEACON	Exp. 03-2015	N	N/A	Y	N	
CASELLA CHICOPEE	10-2015	Y	N/A	Y	Y	
CASELLA GLEN COVE	10-2015	Y	N/A	Y	Y	
CASELLA HUNTINGTON	10-2015	Y	N/A	Y	Y	
CASELLA POUGHKEEPSIE	10-2015	Y	N/A	Y	Y	
CASELLA SUFFOLK	10-2015	Y	N/A	Y	Y	
CASELLA WALDEN	10-2015	Y	N/A	Y	Y	
CASELLA YORKTOWN	10-2015	Y	N/A	Y	Y	
H I STONE-PECKHAM/BYRAM	Exp. 12-2014	N	Y	Y	N	
IBM FISHKILL	Exp. 05-2014	N	N/A	Y	N	
MAHOPAC- MT. EBO	10-2015	Y	N/A	Y	Y	
- REAGANS MILLS	10-2015	Y	N/A	Y	Y	
- HUNTERS GLEN	11-2015	Y	N/A	Y	Y	
- SOMERS CHASE	12-2015	Y	N/A	Y	Y	
- WILLIAMSBURG RIDGE		N	N/A	Y	N	HAS NOT SHIPPED
- FOX RUN	10-2015	Y	N/A	Y	Y	
- BREWSTER TOWN CTR.	10-2015	Y	N/A	Y	Y	
NEW ROCHELLE	10-2015	Y	N/A	Y	Y	
PAWLING	10-2015	Y	N/A	Y	Y	
RHINEBECK WPCF	10-2015	Y	N/A	Y	Y	
SYNAGRO HOLYOKE	08-2015	N	N/A	Y	N	
SYNAGRO HUNT'S POINT	N/A	N/A	N/A	Y	N	NOT SHIPPING YET
SYNAGRO NEWBURGH	04-2015	N	N/A	Y	N	
SYNAGRO NORTHAMPTON	05-2015	N	N/A	Y	N	

SYNAGRO WALLKILL	08-2015	N	N/A	Y	N	
SYNAGRO ORANGE COUNTY	10-2015	Y	N/A	Y	Y	
VES BEDFORD HILLS	11-2015	Y	Y	Y	Y	
VES CRANSTON	10-2015	Y	N/A	Y	Y	
VES LYNN	12-2015	Y	N/A	Y	Y	
VES PEPSI	10-2015	Y	Y	Y	Y	
VES POUGHKEEPSIE - LIQUID	10-2015	Y	N/A	Y	Y	
VOGLER BROS	Exp. 04-2014	N	N/A	N	N	

December 2015 Sludge Data

Source	Gallons	Wet Tons
Beacon Falls	143,000	
Bedford Hills	26,000	
Bristol		731.59
Casella - Chicopee Cake		421.3
Casella - Glen Cove		341.91
Casella - Huntington		419.92
Casella - Poughkeepsie		294.43
Casella - Suffolk		1200.28
Casella - Walden		27.82
Casella - Yorktown		65.97
Danbury Cake		385.08
Fairfield	26,000	
Heritage Village Water	32,500	
Litchfield	58,500	
Lynn, MA		224.51
Lynwood Place (septic)	39,000	
Mahopac Sludge & Septic	571,000	
New Hartford	32,500	
New London	13,000	
New Rochelle		184.44
North Canaan	71,500	
North Haven	143,000	
Pawling	97,500	
Pepsi	13,000	
Plainville	32,500	
Plymouth	104,000	
Poughkeepsie	552,500	
Redding	6,500	
Rhinebeck WPCF		28.2
Salisbury	91,000	
Seymour Cake		146.69
Southbury	97,500	
Southington	442,000	
Stratford	884,000	
Synagro - Ansonia	71,500	
Synagro - Branford	104,000	
Synagro - Bridgeport East	214,500	
Synagro - Bridgeport West	825,500	
Synagro - East Windsor	65,000	
Synagro - Groton	58,500	
Synagro - Mystic	26,000	
Synagro - New Canaan	39,000	
Synagro - Newtown	13,000	
Synagro - Norwalk	234,000	
Synagro - Pawcatuck	13,000	
Synagro - Ridgefield	77,000	
Synagro - Stamford		99.51
Synagro - Stonington	6,500	
Thomaston Treatment	71,500	
Torrington	461,500	
Westport	120,363	
Windham	299,000	
Totals	6,176,363	4571.65

VEOLIA
WATER

Sent Certified R.R.R. mail #7014 1200 0002 2237 0117 on January 12, 2016

Ms. Thelma Murphy
USEPA Region 1
OES Water Technical Unit
Mail Code SEW
JFK Building
Boston MA 02201-0001

January 12, 2016

Re: 503 Regulation Annual Report for 2015

Dear Ms. Murphy:

Enclosed please find a copy of the 2015 annual report for the Borough of Naugatuck, CT. Enclosed is the following:

- Table 3-3, Summary of Metals Results
- Table 3-2, Summary of THC Results
- Field Data Input Sheet
- Flow and Moistures Calculations
- Naugatuck Metals 503 Report
- Summary of Multiple Metals Emissions Testing
- Incinerator Annual Averages
- Incinerator Annual Operating Data

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck
Enclosure: 503 Regulation Annual Report

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

Table 3-3
Summary of Metals Results
WESP on

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	11:40	14:15	Average	
	Stop	10:53	13:45	16:20		
Sample Conditions						
Volume	(dscf)	87.44	86.01	88.67		
	(dscm)	2.476	2.436	2.511		
Isokinetics	(%)	94.5	95.3	98.6		
Sludge Feedrate	(dry Ton/hr)	2.68	2.68	2.68	2.68	
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.57	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Trace Metals						
Arsenic (As) Catch	(mg)	0.001	0.002	0.001	0.001	
As Concentration	(ug/dscm)	0.323	0.591	0.319	0.411	95.4
As Emission Rate	(lb/hr)	0.00002	0.00003	0.00002	0.00002	
Beryllium (Be) Catch	(mg)	0.000	0.000	0.000	0.000	
Be Concentration	(ug/dscm)	0.0808	0.0821	0.0796	0.0808	19.1
Be Emission Rate	(lb/hr)	4.31E-06	4.27E-06	4.13E-06	4.24E-06	
Be Emission Rate	(lbs/day)	0.00010	0.00010	0.00010	0.00010	0.022
Cadmium (Cd) Catch	(mg)	0.000	0.002	0.000	0.001	
Cd Concentration	(ug/dscm)	0.08	0.74	0.08	0.30	763.5
Cd Emission Rate	(lb/hr)	0.00000	0.00004	0.00000	0.00002	
Chromium (Cr) Catch	(mg)	0.008	0.011	0.006	0.0083	
Cr Concentration	(ug/dscm)	1.86	3.37	1.15	2.13	4771.8
Cr Emission Rate	(lb/hr)	0.00010	0.00018	0.00006	0.00011	
Copper (Cu) Catch	(mg)	0.020	0.018	0.010	0.0161	
Cu Concentration	(ug/dscm)	0.42	3.97	0.10	1.50	38,174.8
Cu Emission Rate	(lb/hr)	0.00035	0.00031	0.00014	0.00027	
Lead (Pb) Catch	(mg)	0.004	0.031	0.004	0.013	
Pb Concentration	(ug/dscm)	1.54	12.29	1.53	5.12	5,726.2
Pb Emission Rate	(lb/hr)	0.00008	0.00064	0.00008	0.0003	
Manganese (Mn) Catch	(mg)	0.010	0.086	0.015	0.037	
Mn Concentration	(ug/dscm)	2.53	33.65	4.72	13.63	38,174.8
Mn Emission Rate	(lb/hr)	0.00013	0.00175	0.00024	0.00071	
Mercury (Hg) Catch	(mg)	0.026	0.193	0.221	0.147	
Hg Concentration	(ug/dscm)	10.59	79.15	87.76	59.16	1,908.7
Hg Emission Rate	(lb/hr)	0.00056	0.0041	0.00455	0.0031	
Hg Emission Rate	(lbs/day)	0.0136	0.0988	0.1092	0.0738	7.055
Nickel (Ni) Catch	(mg)	0.014	0.016	0.014	0.015	
Ni Concentration	(ug/dscm)	4.74	5.76	4.51	5.00	9,543.7
Ni Emission Rate	(lb/hr)	0.00025	0.00030	0.00023	0.00026	
Selenium (Se) Catch	(mg)	0.026	0.024	0.022	0.024	
Se Concentration	(ug/dscm)	9.89	9.48	8.44	9.27	7,635.0
Se Emission Rate	(lb/hr)	0.00053	0.00049	0.00044	0.00049	
Zinc (Zn) Catch	(mg)	0.132	0.291	0.086	0.170	
Zn Concentration	(ug/dscm)	51.29	117.41	32.26	66.99	190,873.9
Zn Emission Rate	(lb/hr)	0.0027	0.0061	0.0017	0.0035	

3.3 Problems and Changes

There were no problems or changes that occurred during this test program.

3.4 Presentation of Results

The results of the Emissions Compliance Testing Program indicate that the emissions from FBI are within the allowable limits set forth for this facility by the CTDEEP. **Tables 3-2 through 3-5** provide individual test run results and data.

Table 3-2
Summary of THC Results
WESP on

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	10:12	11:40	Average	
	Stop	9:50	11:12	12:40		
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.6	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Gaseous Emissions						
Volatile Organic Compounds	(ppm)	0.85	1.04	0.90	0.93	
	(lb/hr)	0.08	0.10	0.09	0.09	
	(lb/DT)	0.03	0.04	0.03	0.03	0.32
	(tons/yr)	0.36	0.43	0.37	0.39	

FIELD DATA INPUT SHEET

PLANT: Veolia Naugatuck
SOURCE: FB Sludge Incinerator Out - WESP on

TEST NO: Incinerator Out Metals-1
DATE: 09/22/15

Start Time:	8:50	EDST
End Time:	10:53	EDST
Total Test Time:	120	Mins.

K Factor = 6.5

Cp:	0.84
Pb:	30.33
Pg (static):	1.00
Stack Dia (in.):	42
L (in.):	
W (in.):	
As (ft^2):	9.62
Ps (in. Hg):	30.40
%CO2:	11.24
%O2:	7.75
%CO:	0.00

Impingers (Initial.)

1:	1155.1
2:	735.8
3:	540.0
4:	754.4
5:	646.4
6:	907.2

Impingers (Final)

1:	1303.3
2:	764.0
3:	546.8
4:	759.4
5:	648.7
6:	924.0

Moisture Catch (mg) 207.3

Dry Gas Meter

Start:	705.015
End:	790.264
Y Factor:	1.0180
Leak Check Volume:	0
Final Volume:	85.249

Nozzle Diam. :	0.309
Filter Number :	N/A
No. of Points :	16

Pt.	Delta P	Sqrt.	Delta H	Mtr. In	Mtr. Out	Stk. Tmp.
1	0.28	0.529	1.96	72	69	202
2	0.29	0.539	2.03	73	69	203
3	0.31	0.557	2.02	74	70	205
4	0.31	0.557	2.02	75	71	205
5	0.31	0.557	2.02	75	71	203
6	0.32	0.566	2.08	75	71	201
7	0.32	0.566	2.08	74	71	201
8	0.28	0.529	1.82	75	71	197
1	0.27	0.520	1.76	74	71	200
2	0.29	0.539	1.89	76	72	200
3	0.30	0.548	1.95	77	72	200
4	0.32	0.566	2.08	78	73	201
5	0.33	0.574	2.15	77	73	201
6	0.28	0.529	1.82	77	74	202
7	0.27	0.520	1.76	77	74	201
8	0.25	0.500	1.63	77	74	201
	0.296	0.543	1.939	74		201

FLOWS AND MOISTURES

PLANT: Veolia Naugatuck — TEST NO.: Incinerator Out Metals-1
SOURCE: FB Sludge Incinerator Out - WESP on — DATE: 09/22/15

Meter Volume @ Standard Conditions, Vm(std) — 87.440 dscf; 2.476 dscm

Vm(std) = K1 * Vm * Y Factor * Pm / Tm
where: K1 = 17.64 deg R / in. Hg
Vm = volume of meter, meter conditions, dcf — 85.249
Pm = meter pressure [(Delta H/13.6) + Pb], in. Hg — 30.47
Tm = meter temperature (deg. F + 460), deg. R — 534

Percent Moisture, %H2O — 10.1 %

%H2O = {(K2 * Vc) / [Vm(std) + (K2 * Vc)]} * 100
where: K2 = 0.04707 cu. ft./ml
Vc = volume of condenser catch, ml — 207.3

Moisture Fraction, Bwo — 0.101

Bwo = %H2O / 100

Dry Molecular Weight of Stack Gas, Md — 30.11 lb/lb mol

Md = [(0.44*%CO2)+(0.32*%O2)+(0.28*(%CO+%N N2)]
%CO2 — 11.2
%O2 — 7.8
%CO+%N2 — 81.0

Wet Molecular Weight of Stack Gas, Ms — 28.89 lb/lb mol

Ms = Md * (1-Bwo) + (18 * Bwo)

Stack Gas Velocity, Vs — 33.860 fps

Vs = K3 * Cp * (avg sqrt delta P) * sqrt(Ts/(Ps * Ms))
where: K3 = 85.49 fps * sqrt[(lb/lb mol)(in. Hg)/(deg. R)(in H2O)]
Cp = pitot coefficient, 0.84 for s-type; 0.99 for std. — 0.84
Ts = stack temperature (deg. F + 460), deg. R — 661.4
Ps = stack pressure [(Ps/13.6) + Pb], in. Hg — 30.40

Volumetric Flow Rate, stack conditions, Qa — 19,544 ACFM

Qa = Vs * As * 60
where: As = cross sectional area of stack @ sampling location

Volumetric Flow Rate, standard conditions, Qs — 15,852 SCFM

Qs = Qa * K1 * Ps / Ts

Volumetric Flow Rate, dry standard conditions, Qsd — 14,251 DSCFM

Qds = Qs * (1-Bwo)

Naugatuck POTW, Naugatuck, CT

Sludge Metals 503 Report

YEAR: 2015

	Lead	Arsenic	Cadmium	Chromium	Nickel
January	57.0	2.30	1.36	22.40	18.1
February	41.3	2.60	1.62	27.90	26.8
March	35.3	2.30	1.39	26.60	21.0
April	42.1	3.15	1.57	31.90	21.7
May	46.0	2.70	1.64	21.90	15.0
June	53.5	4.00	1.80	41.50	26.7
July	61.3	3.10	2.12	56.05	25.1
August	61.3	3.70	1.90	81.70	34.9
September	65.2	<0.97	1.54	37.23	23.0
October	59.5	1.30	1.66	46.60	28.3
November	56.8	<0.95	1.63	44.05	24.8
December	38.6	2.80	1.21	30.60	13.2

Note: All values in mg/kg

Summary of Multiple-Metals Emissions Testing
Veolia Water North America LLC
FB Sludge Incinerator - WESP on
Naugatuck, Connecticut
September 22, 2015

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	11:40	14:15	Average	
	Stop	10:53	13:45	16:20		
Sample Conditions						
Volume	(dscf)	87.44	86.01	88.67		
	(dscm)	2.476	2.436	2.511		
Isokinetics	(%)	94.5	95.3	98.6		
Sludge Feedrate	(dry Ton/hr)	2.68	2.68	2.68	2.68	
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.57	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Trace Metals						
Arsenic (As) Catch	(mg)	0.001	0.002	0.001	0.001	
As Concentration	(ug/dscm)	0.323	0.591	0.319	0.411	95.4
As Emission Rate	(lb/hr)	0.00002	0.00003	0.00002	0.00002	
Beryllium (Be) Catch	(mg)	0.000	0.000	0.000	0.000	
Be Concentration	(ug/dscm)	0.0808	0.0821	0.0796	0.0808	19.1
Be Emission Rate	(lb/hr)	4.31E-06	4.27E-06	4.13E-06	4.24E-06	
Be Emission Rate	(lbs/day)	0.00010	0.00010	0.00010	0.00010	0.022
Cadmium (Cd) Catch	(mg)	0.000	0.002	0.000	0.001	
Cd Concentration	(ug/dscm)	0.08	0.74	0.08	0.30	763.5
Cd Emission Rate	(lb/hr)	0.00000	0.00004	0.00000	0.00002	
Chromium (Cr) Catch	(mg)	0.008	0.011	0.006	0.0083	
Cr Concentration	(ug/dscm)	1.86	3.37	1.15	2.13	4771.8
Cr Emission Rate	(lb/hr)	0.00010	0.00018	0.00006	0.00011	
Copper (Cu) Catch	(mg)	0.020	0.018	0.010	0.0161	
Cu Concentration	(ug/dscm)	0.42	3.97	0.10	1.50	38,174.8
Cu Emission Rate	(lb/hr)	0.00035	0.00031	0.00014	0.00027	
Lead (Pb) Catch	(mg)	0.004	0.031	0.004	0.013	
Pb Concentration	(ug/dscm)	1.54	12.29	1.53	5.12	5,726.2
Pb Emission Rate	(lb/hr)	0.00008	0.00064	0.00008	0.0003	
Manganese (Mn) Catch	(mg)	0.010	0.086	0.015	0.037	
Mn Concentration	(ug/dscm)	2.53	33.65	4.72	13.63	38,174.8
Mn Emission Rate	(lb/hr)	0.00013	0.00175	0.00024	0.00071	
Mercury (Hg) Catch	(mg)	0.026	0.193	0.221	0.147	
Hg Concentration	(ug/dscm)	10.59	79.15	87.76	59.16	1,908.7
Hg Emission Rate	(lb/hr)	0.00056	0.0041	0.00455	0.0031	
Hg Emission Rate	(lbs/day)	0.0136	0.0988	0.1092	0.0738	7,055
Nickel (Ni) Catch	(mg)	0.014	0.016	0.014	0.015	
Ni Concentration	(ug/dscm)	4.74	5.76	4.51	5.00	9,543.7
Ni Emission Rate	(lb/hr)	0.00025	0.00030	0.00023	0.00026	
Selenium (Se) Catch	(mg)	0.026	0.024	0.022	0.024	
Se Concentration	(ug/dscm)	9.89	9.48	8.44	9.27	7,635.0
Se Emission Rate	(lb/hr)	0.00053	0.00049	0.00044	0.00049	
Zinc (Zn) Catch	(mg)	0.132	0.291	0.086	0.170	
Zn Concentration	(ug/dscm)	51.29	117.41	32.26	66.99	190,873.9
Zn Emission Rate	(lb/hr)	0.0027	0.0061	0.0017	0.0035	

INCINERATOR MONTHLY EMISSION REPORT1

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT

DATE CREATED: 01/12/2016 @ 08:24
PERIOD: 01/2015 - 12/2015

DATE	SOURCE ON (HRS)	TOTAL SLUDGE PV (%)	OVERALL DP ("wc)	BED TEMP (F)	FREE BOARD TEMP (F)	FB O2 (%)	CO @7% (ppmvd)	OPACITY (%)	WESP KV #1 (kV)	WESP KV #2 (kV)	OIL FLOW (GPH)	OIL FLOW (GAL)	DAS DOWN (HRS)
01/2015	725.43	75.5	52.8	1406.2	1629.2	8.9	36.2	0.38	49.74	0.00	9.8	6671.9	0.00
02/2015	651.28	71.8	39.0	1399.5	1618.5	10.1	46.2	0.35	47.46	0.00	26.5	16863.2	0.00
03/2015	543.87	73.5	63.2	1406.7	1615.5	8.7	17.1	0.53	48.25	0.00	20.8	9646.5	1.85
04/2015	703.35	72.1	40.7	1422.3	1670.3	7.3	26.2	0.74	49.53	0.00	15.2	10580.4	0.00
05/2015	738.25	72.4	44.0	1487.4	1699.2	6.5	16.3	0.64	55.14	0.00	0.1	56.0	0.00
06/2015	681.80	80.8	42.6	1482.6	1675.3	7.0	16.1	0.45	53.63	0.00	0.3	96.0	3.12
07/2015	716.88	75.6	40.9	1469.1	1653.0	8.4	7.0	1.43	54.10	0.00	0.0	0.0	0.00
08/2015	689.45	76.3	41.6	1467.2	1662.3	8.2	7.1	0.00	53.80	0.00	0.0	0.0	1.93
09/2015	676.75	74.5	42.2	1456.0	1655.6	7.5	8.1	0.60	53.49	0.00	0.0	0.0	1.88
10/2015	650.32	69.6	37.1	1431.4	1624.0	9.0	16.3	2.83	50.26	0.00	0.0	0.0	0.03
11/2015	675.03	68.3	40.4	1444.8	1664.3	7.8	12.6	4.88	51.66	0.00	0.0	0.0	0.52
12/2015	724.95	68.9	42.7	1427.9	1670.8	7.2	24.4	4.43	51.54	0.00	0.0	0.0	0.00

	SOURCE ON (HRS)	TOTAL SLUDGE PV (%)	OVERALL DP ("wc)	BED TEMP (F)	FREE BOARD TEMP (F)	FB O2 (%)	CO @7% (ppmvd)	OPACITY (%)	WESP KV #1 (kV)	WESP KV #2 (kV)	OIL FLOW (GPH)	OIL FLOW (GAL)	DAS DOWN (HRS)
AVERAGE		73.3	43.9	1441.8	1653.2	8.1	19.5	1.44	51.55	0.00	6.1		
TOTAL	8177.37											43914.0	9.33
MIN VALUE		68.3	37.1	1399.5	1615.5	6.5	7.0	0.00	47.46	0.00	0.0	0.0	
MIN DATE		11/2015	10/2015	02/2015	03/2015	05/2015	07/2015	08/2015	02/2015	01/2015	07/2015	07/2015	
MAX VALUE		80.8	63.2	1487.4	1699.2	10.1	46.2	4.88	55.14	0.00	26.5	16863.2	
MAX DATE		06/2015	03/2015	05/2015	05/2015	02/2015	02/2015	11/2015	05/2015	12/2015	02/2015	02/2015	

INCINERATOR MONTHLY EMISSION REPORT2

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT

DATE CREATED: 01/12/2016 @ 08:25
PERIOD: 01/2015 - 12/2015

DATE	PROCESS CODE	NORTH SLUDGE PV (%)	SOUTH SLUDGE PV (%)	SCRUBBER DP ("wc)	VENTURI DP ("wc)	SCRUBBER WATER (gpm)	VENTURI WATER (gpm)	4TH TRAY WATER (gpm)	CO (ppmvd)	O2-D (%)	SOURCE ON (HRS)
01/2015	8	67.9	7.6	25.1	25.0	596.3	364.3	318.6	32.4	8.9	725.43
02/2015	8	42.9	28.9	12.0	24.4	580.4	372.2	338.7	37.4	10.1	651.28
03/2015	8	36.3	37.5	30.0	24.9	607.4	351.3	312.1	15.9	8.7	543.87
04/2015	8	3.8	68.3	13.3	24.8	604.5	339.1	321.9	26.8	7.3	703.35
05/2015	8	8.9	63.5	16.4	24.9	572.3	328.8	270.6	16.7	6.5	738.25
06/2015	8	60.9	19.9	15.6	24.4	590.4	320.5	291.6	14.8	7.0	681.80
07/2015	8	58.1	17.5	13.5	24.7	601.6	324.7	326.0	6.6	8.3	716.88
08/2015	8	46.5	28.0	14.3	24.6	604.7	325.6	335.3	7.5	8.1	689.45
09/2015	8	74.2	0.0	14.7	24.8	602.9	325.4	321.1	8.5	7.5	676.75
10/2015	8	48.4	21.3	11.7	28.6	593.9	309.7	304.2	15.8	8.9	650.32
11/2015	8	37.4	30.9	12.9	24.8	602.0	336.2	361.7	12.7	7.7	675.03
12/2015	8	2.1	66.6	15.2	24.9	585.9	316.2	351.7	21.8	7.1	724.95

	PROCESS CODE	NORTH SLUDGE PV (%)	SOUTH SLUDGE PV (%)	SCRUBBER DP ("wc)	VENTURI DP ("wc)	SCRUBBER WATER (gpm)	VENTURI WATER (gpm)	4TH TRAY WATER (gpm)	CO (ppmvd)	O2-D (%)	SOURCE ON (HRS)
AVERAGE		40.6	32.5	16.2	25.1	595.2	334.5	321.1	18.1	8.0	0.00
TOTAL											0.00
MIN VALUE		2.1	0.0	11.7	24.4	572.3	309.7	270.6	6.6	6.5	
MIN DATE		12/2015	09/2015	10/2015	02/2015	05/2015	10/2015	05/2015	07/2015	05/2015	
MAX VALUE		74.2	68.3	30.0	28.6	607.4	372.2	361.7	37.4	10.1	
MAX DATE		09/2015	04/2015	03/2015	10/2015	03/2015	02/2015	11/2015	02/2015	02/2015	

WRIGHT-PIERCE
Engineering a Better Environment

Water
Wastewater
Infrastructure

May 24, 2015
W-P Project No. 13118A

Mr. John Batorski, Project Manager
Veolia Water
500 Cherry Street
Naugatuck, CT 06770

Subject: Naugatuck Water Pollution Control Facility (WPCF)
Review of Sludge Handling Procedures for Compliance with
NPDES Permit No. 0100641

Dear John:

As requested, Wright-Pierce has reviewed the Sludge Handling Management Plan implemented by Veolia Water at the Naugatuck WPCF. Requirements of the permit are outlined below, followed by an explanation of related Naugatuck WPCF protocols.

BACKGROUND

The Naugatuck Water Pollution Control Facility (WPCF), operated by Veolia Water (VW) accepts trucked in sludge and cake from various in and out-of-state facilities that is incinerated on site.

On August 21, 2014, the facility received a NPDES permit from the Department of Energy & Environmental Protection (DEEP). Therefore, VW retained Wright-Pierce to review sludge handling procedures to ensure permit compliance. Wright-Pierce has reviewed the permit requirements of Section 9, which refer to the required trucked-in sludge handling procedures. The procedures are addressed as follows.

SECTION 9 PERMIT REQUIREMENTS AND CURRENT VW SLUDGE HANDLING PROTOCOLS

All Out of State Municipal POTW Sewage Sludge Generators and All Out of State Privately Owned Domestic Sewage Sludge Generators

1. *The Permittee shall monitor or cause each generator to monitor the pollutants specified in Table H of this permit at a frequency no less than quarterly. In the event of an infrequent delivery to the POTW, the generator shall submit monitoring results for all the pollutants listed in Table H in the permit from a representative sludge sample generated and collected within the previous three months.*

   Veolia maintains standing contracts/agreements requiring that the facilities monitor sludge quarterly. Facilities are required to perform quarterly analyses on their sludge and send the

results to VW. If the generator does not furnish quarterly monitoring results for all parameters included in Table H (included in Attachment A), VW will test for Table H parameters. For generators that deliver sludge to VW infrequently, there is the possibility that sludge with expired test results may be delivered to VW's facility. In order to maintain sludge processing procedures, VW will accept the sludge and test it upon receipt to ensure that the sludge is compliant. If the sludge from any generator does not meet Table H requirements per VW's test, that generator shall no longer be allowed to send sludge to VW's facility. VW will only allow this procedure for long-standing sludge generators who have no history of issues with their sludge.

Trucked-in sludge haulers are furthermore required to warrant that trucked-in materials comply with acceptance criteria, and haulers are required to advise VW of any changes in the process of generating the trucked-in materials that may affect the characteristics of such materials. These provisions are included in the Naugatuck Sludge Testing/Trucked-In Protocol Requirements (see Attachment A).

Initially there was some confusion regarding required analyses as other incinerator sites had different record-keeping requirements. VW made every effort to obtain quarterly Table H analysis. However, as a result of human error, some sources were not tested during the first quarter. While the annual analyses were compliant, the quarterly Table H analysis for Mahopac, Pawling, Rhinebeck, New Rochelle, Poughkeepsie, and Vogler were not. Some generators' TCLP tests did not include PCBs or selenium, and therefore did not meet the requirements. As a result, VW developed a program with an improved tracking system. The sources previously stated will all be tested and current in the second quarter of 2015. VW anticipates no monitoring issues going forward. All certifications regarding the sludge protocol and testing reflect a second quarter date.

2. *Each out-of-state generator must be analyzed by the Permittee for all pollutants listed in Table H prior to acceptance at the POTW. The Permittee shall determine that each such source is compatible with all other wastewater sludges accepted for incineration.*

   VW requires an initial residual test from the source facility prior to approval of any acceptance agreement. Thereafter, VW will sample each source facility at a minimum of once per year, or more frequently if deemed necessary (stated in Trucked-In Materials Protocols, included in Attachment A). These files are kept on-site at the VW facility according to the record-keeping protocols (included in Attachment A).

3. *Each out of state generator shall provide a description of the domestic, commercial and industrial components generating the biological sludge.*

   VW requires out-of-state generators to submit a description of their sludge, including the percentages of domestic and commercial/industrial flows, names and percentages of largest commercial/industrial flow generators, and a description of the type of flow produced by major contributors of commercial-industrial flow generators. This description is required before trucked-in materials will be accepted by VW. VW maintains sludge descriptions on file as described in the Sludge Recordkeeping Protocol Description, included in Attachment A.

All (In state or Out of State) Commercial and Industrial (Non-Domestic) Sludges

1. *Prior to acceptance of any non-domestic wastewater sludge for incineration, the Permittee shall, as applicable, require the generator of such sludge to:*

   a. *Submit to the POTW a copy of its current active individual wastewater discharge permit issued by DEEP under Section 22a-430 of the Connecticut General Statutes (CGS);*

   b. *If eligible under DEEP's general permit program (Section 22a-430b CGS), submit to the POTW a copy of that permit and, if required, the associated registration; or*

   c. *Submit to the POTW a copy of any pertinent emergency or temporary authorization issued by the Commissioner pursuant to Section 22a-6k CGS.*

   For non-domestic sludge generators, VW requires a Waste Profile Form be submitted with analytical data to the CTDEEP for approval. The generator must also furnish a copy of its active wastewater discharge permit or temporary authorization as applicable (see Attachment A).

Permittee Actions

1. *The Permittee shall conduct at its facility bimonthly monitoring of all the pollutants listed in Table H on a representative sample of filter cake taken prior to incineration.*

   In-house sludge is monitored bi-monthly as is required by the permit. See Attachment B for representative test results.

2. *The Permittee shall conduct annual monitoring of all the pollutants listed in Table H for each municipal POTW and private sewage sludge generator accepted for incineration.*

   VW will sample each source facility at a minimum of once per year, or more frequently if deemed necessary (stated in Trucked-In Materials Protocols, included in Attachment A).

3. *The Permittee shall include in its Monthly Operating Report (MOR) a list of all municipal, private and commercial/industrial sludge sources and the quantity of sludge accepted from each source.*

   See Attachment C for a list of generators and sludge quantities, to be included in VW's MOR.

4. *An Administrative Order issued March 24, 2015 requires the protocol be reported by June 15, 2015. The Administrative Order is included in Attachment D.*

   VW has prepared a report to comply and the required statements are included in Attachment D. While every effort was made by VW to obtain quarterly Table H analysis, some sources did not have a quarterly analysis for the first quarter of 2015 due to a human error. The booklet was developed to better track all sources and the signed certifications reflect a second quarter date.

a. *A statement certifying that all new out of state generators have been screened for acceptance in accordance with the approved protocol.*

See Attachment D.

b. *A statement certifying that the Permittee has monitored or caused the generator of all out of state municipal POTW sewage sludge and privately owned domestic sewage sludge to monitor its wastewater sludge in accordance with paragraph (1)(a).*

See Attachment D.

c. *A statement certifying that all generators of commercial and industrial (non-domestic) wastewater sludge accepted for incineration have complied with the requirements of paragraph (2)(a).*

See Attachment D.

d. *A copy of the Permittee's most current annual 40 CFR 503 report.*

VW will include their most recent 40 CFR 503 report in the annual report.

e. *The individuals responsible for submitting the report shall certify in writing the following: "I certify 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."*

See Attachment D.

Based on our review of pertinent information provided by VW and interviews with VW staff, Wright-Pierce concludes that the Naugatuck WPCF sludge-handling protocol developed and recently updated (to include a booklet to better track all sources) by VW meets the intent of the sludge handling requirements outlined in Section 9 of Permit No. 0100641.

Please contact us if you have any questions.

Sincerely,
WRIGHT-PIERCE

Mariusz Jedrychowski, P.E.
Senior Project Manager

Amanda E. Ziegler, PE
Project Engineer

VEOLIA

Sent via Certified R.R.R. Mail 7014 1200 0002 2236 9920 on Jan. 13, 2016

Jan. 13, 2016

Connecticut Department of Energy and Environmental Protection
Mr. John Degirolamo
Bureau of Air Management
Engineering and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

Subject: Continuous Emission Monitoring Semi Annual Report, July 1, 2015 to December 31, 2015.

Dear Mr. John Degirolamo:

Enclosed you will find a copy 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

John Batorski
Project Manager

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

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

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

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

CEM Forms Package, 08/19/96

CONTINUOUS EMISSION MONITORING SEMI-ANNUAL REPORT

GENERAL INFORMATION

Company name	Borough of Naugatuck
Facility name	Borough of Naugatuck POTW
Facility address	229 Church Street, Naugatuck, CT 06770
Contact person	Mr. John Batorski john.batorski@veolia.com
Contact phone number	(203) 723-1433
Reporting period dates	July 1, 2015 – December 31, 2015
Report submittal date	January 13, 2016
Were there any excess emissions this quarter?	No
Were there any CEM monitor system failures this period?	YES

EQUIPMENT INFORMATION

Applicable permit numbers	CT DEP Permit # 209-0059-TV
Applicable federal regulations	40 CFR Part 503, Subpart E
Type of fuel(s) combusted	No. 2 Fuel Oil
Brief description of equipment and pollution control devices	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.

SEMI-ANNUAL REPORT CERTIFICATION

39.20
I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense.

Michael Unterweger, CK Environmental, Preparer

Today's date: 1-13-16
Signature (Company Officer): John Batorski
Print (or type) name and title: John Batorski Plant Manager

CONNECTICUT DEP - Bureau of Air Management

CEM Forms Package, 08/19/96

CONTINUOUS EMISSION MONITORING PERFORMANCE REPORT	
Company name	Borough of Naugatuck
Reporting period	07/01/2015 – 12/31/2015
Unit number	EMU 52
Unit operating time	4140.43 Hours

MONITOR INFORMATION	
Pollutant / Constituent	CO @ 7% O2
Sampling location	Stack
Manufacturer / Model number	Thermo Environmental Model 48i
Instrument range(s)	0-300 ppm
Date of last audit	November 20, 2015
Audit type (e.g., CGA, RATA, RAA)	CGA
Audit results (pass / fail)	Pass

CMS DOWNTIME	
REASONS	TIME (hours, or minutes for opacity)
Monitoring equipment malfunctions	.02 hours
Non-monitoring equipment malfunctions	4.68 hours
Calibrations	37.72 hours
Other known causes [1]	19.11 hours
Unknown causes	0
TOTAL CMS DOWNTIME	61.53 hours

QUARTERLY DATA AVAILABILITY RESULTS	
Quarterly Data Availability (% of operating hours)(see below)	98.51%

Data Availability = $\frac{\text{Unit Operating Time - Total CMS Downtime}}{\text{Unit Operating Time}} \times 100$

Where:

Unit Operating Hours = Total number of hours that the unit (or process) was operated at <u>any</u> level.

Total CMS Downtime = Total time during periods of operation (Unit Operating Time) in which <u>invalid</u> CEM data or <u>no</u> CEM data is collected due to any reason and results in the invalidation of a data block period.

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[1] *- includes all Quality Assurance activities other than calibration (i.e., preventative maintenance, audits which result in periods of invalid data, etc.) and "out-of-control" periods.*

CONNECTICUT DEP - Bureau of Air Management

CEM Forms Package, 08/19/96

CONTINUOUS EMISSION MONITORING PERFORMANCE REPORT

Company name	Borough of Naugatuck
Reporting period	07/01/2015 – 12/31/2015
Unit number	EMU 52
Unit operating time	4145.13 hours

MONITOR INFORMATION

Pollutant / Constituent	Opacity
Sampling location	Stack
Manufacturer / Model number	Land / 4500 Mark III
Instrument range(s)	0-100 ppm
Date of last audit	November 20, 2015
Audit type (e.g., CGA, RATA, RAA)	Opacity
Audit results (pass / fail)	Pass

CMS DOWNTIME

REASONS	TIME (hours, or minutes for opacity)
Monitoring equipment malfunctions	44.38 hours
Non-monitoring equipment malfunctions	4.48 hours
Calibrations	21.17 hours
Other known causes [1]	19.95 hours
Unknown causes	0
TOTAL CMS DOWNTIME	89.98 hours

QUARTERLY DATA AVAILABILITY RESULTS

Quarterly Data Availability (% of operating hours)(see below)	97.83%

$$\text{Data Availability} = \frac{\text{Unit Operating Time - Total CMS Downtime}}{\text{Unit Operating Time}} \times 100$$

Where:

Unit Operating Hours = Total number of hours that the unit (or process) was operated at <u>any</u> level.

Total CMS Downtime = Total time during periods of operation (Unit Operating Time) in which <u>invalid</u> CEM data or <u>no</u> CEM data is collected due to any reason and results in the invalidation of a data block period.

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[1] *- includes all Quality Assurance activities other than calibration (i.e., preventative maintenance, audits which result in periods of invalid data, etc.) and "out-of-control" periods.*

CONNECTICUT DEP - Bureau of Air Management

CEM Forms Package, 08/19/96

SEMI-ANNUAL EXCESS EMISSION REPORT		
Company Name	Borough of Naugatuck	
Reporting period	07/01/2015 – 12/31/2015	
Unit number	EMU 52	
Unit operating time	4140.43 hours	
POLLUTANT / EMISSION LIMITS		
Pollutant / constituent monitored	CO @ 7% O2	
	Permit	**Federal**
Emission limit(s)	1.4 lbs/DT	
Averaging period(s): (indicate length of ave. period and whether period is a rolling or block ave.)		
CONVERSION FACTORS (if applicable)		
Diluent used for correction (O_2 / CO_2)	Oxygen	
CEM measurement basis (wet / dry)	Dry	
Fuel factor(s) / types (F_d / F_c / F_w)		
Conversion equation(s)	CO @ 7% O2 = ((20.9-7)/(20.9-OXYGEN))*CO ppm	
EXCESS EMISSIONS DATA SUMMARY		
Reason for excess emissions	Duration (in minutes for opacity, in hours for other pollutants)	
	List exceedances of DEP permit or Regulations	List violations of Federal standards
Start-up / shut down	0 (gas) + 0 (oil)	
Control equipment malfunction	0 (gas) + 0 (oil)	
Process malfunction	0 (gas) + 0 (oil)	
Other known causes	0 (gas) + 0 (oil)	
Unknown causes	0 (gas) + 0 (oil)	
Total duration of excess emissions (hours or minutes)	0 (gas) + 0 (oil)	
Total duration (as % of total unit operating time)		

CONNECTICUT DEP - Bureau of Air Management

CEM Forms Package, 08/19/96

SEMI-ANNUAL EXCESS EMISSION REPORT			
Company Name	Borough of Naugatuck		
Reporting period	07/01/2015 – 12/31/2015		
Unit number	EMU 52		
Unit operating time	4145.13 hours		
POLLUTANT / EMISSION LIMITS			
Pollutant / constituent monitored	**OPACITY**		
	Permit		**Federal (if applicable)**
Emission limit(s)	20%	40%	
Averaging period(s):	6 minute block	instantaneous	
EXCESS EMISSIONS DATA SUMMARY			
Reason for excess emissions	Duration (in minutes for opacity)		
	List exceedances of DEP permit or Regulations		List violations of Federal standards
Start-up / shut down	0	ONLY THE TOTALS (see below) ARE REQUIRED FOR THE 40% OPACITY READINGS	0
Control equipment malfunction	0		0
Process malfunction	0		0
Other known causes	0		0
Unknown causes	0		0
Fuel problems	0		0
Cleaning, Soot-blowing	0		0
Total duration of excess emissions (hours or minutes)	0		0
Total duration (as % of total unit operating time)	.0		0

NOTIFICATION OF EXCEEDANCE

Source Name	Borough of Naugatuck
Date of Exceedence	No Exceedences
Pollutant / Constituent	
Unit No.	EMU 52

EXCEEDANCE DATA

Time of exceedance	Averaging period	Exceedance magnitude	Permit limit (with units)	Other applicable data

EXPLANATION OF EXCURSION(S)

Cause of excursions	Corrective action(s)	Preventative measure(s)

REPORT CERTIFICATION

DEP Contact Name	
Today's Date	
Signature (Company Officer)	
Title	

Invalid emmissions

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/11/2016 @ 09:38
PERIOD: 07/01/2015 - 12/31/2015

INCIDENT: INVALID CO (ppmvd)

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
07/01/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/01/2015	07:57	07:59	3	15	PREVENTIVE MAINTENANCE	N/A
07/02/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/02/2015	07:05	07:13	9	14	RECALIBRATION	N/A
07/02/2015	07:26	07:34	9	14	RECALIBRATION	N/A
07/02/2015	07:59	08:01	3	15	PREVENTIVE MAINTENANCE	N/A
07/02/2015	08:14	08:22	9	14	RECALIBRATION	N/A
07/02/2015	09:24	09:32	9	14	RECALIBRATION	N/A
07/02/2015	09:35	09:37	3	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/02/2015	09:44	09:54	11	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/03/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/03/2015	08:01	08:03	3	15	PREVENTIVE MAINTENANCE	N/A
07/03/2015	12:59	13:13	15	13	PROCESS DOWN	N/A
07/03/2015	14:29	15:58	90	13	PROCESS DOWN	N/A
07/03/2015	16:29	16:43	15	13	PROCESS DOWN	N/A
07/03/2015	17:14	18:13	60	13	PROCESS DOWN	N/A
07/04/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/04/2015	08:03	08:05	3	15	PREVENTIVE MAINTENANCE	N/A
07/05/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/05/2015	08:05	08:07	3	15	PREVENTIVE MAINTENANCE	N/A
07/06/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/06/2015	08:07	08:09	3	15	PREVENTIVE MAINTENANCE	N/A
07/06/2015	14:44	15:13	30	13	PROCESS DOWN	N/A
07/07/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/07/2015	08:09	08:11	3	15	PREVENTIVE MAINTENANCE	N/A
07/07/2015	08:44	11:58	195	13	PROCESS DOWN	N/A
07/08/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/08/2015	08:11	08:13	3	15	PREVENTIVE MAINTENANCE	N/A
07/09/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/09/2015	08:13	08:15	3	15	PREVENTIVE MAINTENANCE	N/A
07/10/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/10/2015	08:15	08:17	3	15	PREVENTIVE MAINTENANCE	N/A
07/10/2015	09:17	10:27	71	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/11/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/11/2015	08:17	08:19	3	15	PREVENTIVE MAINTENANCE	N/A
07/12/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/12/2015	08:19	08:21	3	15	PREVENTIVE MAINTENANCE	N/A
07/13/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/13/2015	07:53	13:08	316	13	PROCESS DOWN	N/A
07/14/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/14/2015	08:23	08:25	3	15	PREVENTIVE MAINTENANCE	N/A
07/15/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/15/2015	08:25	08:27	3	15	PREVENTIVE MAINTENANCE	N/A
07/15/2015	14:32	14:43	12	14	RECALIBRATION	N/A
07/16/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/16/2015	08:27	08:29	3	15	PREVENTIVE MAINTENANCE	N/A
07/17/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/17/2015	08:30	08:32	3	15	PREVENTIVE MAINTENANCE	N/A
07/18/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/18/2015	08:33	08:35	3	15	PREVENTIVE MAINTENANCE	N/A
07/19/2015	06:52	07:03	12	14	RECALIBRATION	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
07/19/2015	08:36	08:38	3	15	PREVENTIVE MAINTENANCE	N/A
07/20/2015	06:35	16:41	607	13	PROCESS DOWN	N/A
07/20/2015	22:04	22:15	12	13	PROCESS DOWN	N/A
07/21/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/21/2015	08:40	08:42	3	15	PREVENTIVE MAINTENANCE	N/A
07/22/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/22/2015	08:42	08:45	4	15	PREVENTIVE MAINTENANCE	N/A
07/23/2015	06:51	07:03	13	14	RECALIBRATION	N/A
07/23/2015	08:45	08:48	4	15	PREVENTIVE MAINTENANCE	N/A
07/24/2015	06:51	07:02	12	14	RECALIBRATION	N/A
07/24/2015	08:48	08:51	4	15	PREVENTIVE MAINTENANCE	N/A
07/24/2015	09:20	10:38	79	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/25/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/25/2015	08:50	08:53	4	15	PREVENTIVE MAINTENANCE	N/A
07/26/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/26/2015	08:53	08:56	4	15	PREVENTIVE MAINTENANCE	N/A
07/27/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/27/2015	08:56	08:59	4	15	PREVENTIVE MAINTENANCE	N/A
07/28/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/28/2015	08:58	09:01	4	15	PREVENTIVE MAINTENANCE	N/A
07/28/2015	18:18	20:09	112	13	PROCESS DOWN	N/A
07/29/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/29/2015	09:00	09:03	4	15	PREVENTIVE MAINTENANCE	N/A
07/29/2015	15:38	15:53	16	14	RECALIBRATION	N/A
07/30/2015	06:52	07:03	12	14	RECALIBRATION	N/A
07/30/2015	09:02	09:05	4	15	PREVENTIVE MAINTENANCE	N/A
07/30/2015	13:03	13:09	7	13	PROCESS DOWN	N/A
07/30/2015	13:14	13:22	9	13	PROCESS DOWN	N/A
07/31/2015	06:51	07:03	13	14	RECALIBRATION	N/A
07/31/2015	09:04	09:07	4	15	PREVENTIVE MAINTENANCE	N/A
07/31/2015	10:32	13:10	159	13	PROCESS DOWN	N/A
08/01/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/01/2015	09:07	09:09	3	15	PREVENTIVE MAINTENANCE	N/A
08/02/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/02/2015	09:09	09:11	3	15	PREVENTIVE MAINTENANCE	N/A
08/03/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/03/2015	08:06	15:01	416	13	PROCESS DOWN	N/A
08/04/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/04/2015	07:26	07:45	20	13	PROCESS DOWN	N/A
08/04/2015	09:13	09:15	3	15	PREVENTIVE MAINTENANCE	N/A
08/05/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/05/2015	09:14	09:17	4	15	PREVENTIVE MAINTENANCE	N/A
08/05/2015	09:21	09:36	16	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/05/2015	09:37	09:48	12	14	RECALIBRATION	N/A
08/06/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/06/2015	07:54	08:11	18	13	PROCESS DOWN	N/A
08/06/2015	09:16	09:19	4	15	PREVENTIVE MAINTENANCE	N/A
08/07/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/07/2015	09:19	09:21	3	15	PREVENTIVE MAINTENANCE	N/A
08/08/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/08/2015	09:21	09:23	3	15	PREVENTIVE MAINTENANCE	N/A
08/08/2015	22:55	23:59	65	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/09/2015	00:00	00:26	27	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/09/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/09/2015	10:54	10:56	3	15	PREVENTIVE MAINTENANCE	N/A
08/10/2015	05:56	12:31	396	13	PROCESS DOWN	N/A
08/11/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/11/2015	09:28	10:33	66	13	PROCESS DOWN	N/A
08/11/2015	10:59	11:01	3	15	PREVENTIVE MAINTENANCE	N/A
08/12/2015	06:52	07:03	12	14	RECALIBRATION	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
08/12/2015	11:01	11:03	3	15	PREVENTIVE MAINTENANCE	N/A
08/13/2015	06:52	07:01	10	13	PROCESS DOWN	N/A
08/13/2015	07:02	07:03	2	14	RECALIBRATION	N/A
08/13/2015	11:03	11:05	3	15	PREVENTIVE MAINTENANCE	N/A
08/14/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/14/2015	11:05	11:07	3	15	PREVENTIVE MAINTENANCE	N/A
08/15/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/15/2015	11:07	11:09	3	15	PREVENTIVE MAINTENANCE	N/A
08/16/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/16/2015	11:10	11:12	3	15	PREVENTIVE MAINTENANCE	N/A
08/17/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/17/2015	07:17	14:31	435	13	PROCESS DOWN	N/A
08/17/2015	18:17	18:32	16	13	PROCESS DOWN	N/A
08/17/2015	21:09	23:59	171	13	PROCESS DOWN	N/A
08/18/2015	00:00	02:53	174	13	PROCESS DOWN	N/A
08/18/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/18/2015	09:19	09:38	20	13	PROCESS DOWN	N/A
08/18/2015	11:16	11:18	3	15	PREVENTIVE MAINTENANCE	N/A
08/19/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/19/2015	11:18	11:20	3	15	PREVENTIVE MAINTENANCE	N/A
08/20/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/20/2015	11:20	11:22	3	15	PREVENTIVE MAINTENANCE	N/A
08/20/2015	21:39	23:59	141	13	PROCESS DOWN	N/A
08/21/2015	00:00	02:23	144	13	PROCESS DOWN	N/A
08/21/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/21/2015	08:33	08:41	9	14	RECALIBRATION	N/A
08/21/2015	08:42	08:49	8	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/21/2015	08:50	08:57	8	14	RECALIBRATION	N/A
08/21/2015	08:58	09:24	27	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/21/2015	09:25	09:33	9	14	RECALIBRATION	N/A
08/21/2015	09:34	09:47	14	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/21/2015	09:48	09:53	6	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/21/2015	09:54	10:38	45	13	PROCESS DOWN	N/A
08/21/2015	10:39	10:44	6	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/21/2015	10:45	10:45	1	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/21/2015	10:46	10:57	12	14	RECALIBRATION	N/A
08/21/2015	10:58	11:10	13	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/21/2015	11:22	11:24	3	15	PREVENTIVE MAINTENANCE	N/A
08/21/2015	12:57	13:05	9	19	SAMPLE INTERFACE MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
08/21/2015	13:12	13:26	15	19	SAMPLE INTERFACE MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
08/21/2015	13:32	13:38	7	19	SAMPLE INTERFACE MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
08/22/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/22/2015	11:24	11:26	3	15	PREVENTIVE MAINTENANCE	N/A
08/23/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/23/2015	11:26	11:28	3	15	PREVENTIVE MAINTENANCE	N/A
08/23/2015	15:55	16:02	8	13	PROCESS DOWN	N/A
08/24/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/24/2015	07:40	14:49	430	13	PROCESS DOWN	N/A
08/25/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/25/2015	11:27	11:29	3	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/25/2015	11:30	11:32	3	15	PREVENTIVE MAINTENANCE	N/A
08/25/2015	11:53	12:01	9	14	RECALIBRATION	N/A
08/25/2015	12:56	13:36	41	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/25/2015	13:37	13:48	12	14	RECALIBRATION	N/A
08/26/2015	06:45	10:04	200	13	PROCESS DOWN	N/A
08/26/2015	11:32	11:34	3	15	PREVENTIVE MAINTENANCE	N/A
08/27/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/27/2015	11:34	11:36	3	15	PREVENTIVE MAINTENANCE	N/A
08/27/2015	12:02	12:25	24	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/27/2015	12:49	12:53	5	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
08/27/2015	13:34	14:32	59	13	PROCESS DOWN	N/A
08/28/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/28/2015	11:36	11:38	3	15	PREVENTIVE MAINTENANCE	N/A
08/29/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/29/2015	11:38	11:40	3	15	PREVENTIVE MAINTENANCE	N/A
08/30/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/30/2015	11:40	11:42	3	15	PREVENTIVE MAINTENANCE	N/A
08/31/2015	06:52	07:03	12	14	RECALIBRATION	N/A
08/31/2015	07:45	13:41	357	13	PROCESS DOWN	N/A
09/01/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/01/2015	09:20	12:25	186	13	PROCESS DOWN	N/A
09/02/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/02/2015	11:46	11:48	3	15	PREVENTIVE MAINTENANCE	N/A
09/03/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/03/2015	07:36	08:46	71	13	PROCESS DOWN	N/A
09/03/2015	11:49	11:51	3	15	PREVENTIVE MAINTENANCE	N/A
09/04/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/04/2015	11:51	11:53	3	15	PREVENTIVE MAINTENANCE	N/A
09/05/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/05/2015	11:53	11:55	3	15	PREVENTIVE MAINTENANCE	N/A
09/06/2015	05:04	05:05	2	13	PROCESS DOWN	N/A
09/06/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/06/2015	11:55	11:57	3	15	PREVENTIVE MAINTENANCE	N/A
09/07/2015	06:52	07:03	12	14	RECALIBRATION	N/A
09/07/2015	11:58	12:00	3	15	PREVENTIVE MAINTENANCE	N/A
09/08/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/08/2015	08:41	13:45	305	13	PROCESS DOWN	N/A
09/09/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/09/2015	12:04	12:06	3	15	PREVENTIVE MAINTENANCE	N/A
09/10/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/10/2015	09:42	09:44	3	13	PROCESS DOWN	N/A
09/10/2015	09:45	11:13	89	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	11:14	14:10	177	13	PROCESS DOWN	N/A
09/10/2015	14:11	14:15	5	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
09/10/2015	14:16	14:27	12	14	RECALIBRATION	N/A
09/10/2015	14:31	14:41	11	14	RECALIBRATION	N/A
09/10/2015	14:42	15:15	34	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/10/2015	15:16	15:24	9	14	RECALIBRATION	N/A
09/10/2015	17:01	17:07	7	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	17:37	17:39	3	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	19:01	19:18	18	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	20:41	20:44	4	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	21:10	21:14	5	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/10/2015	21:55	21:55	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
09/11/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/11/2015	13:58	14:00	3	15	PREVENTIVE MAINTENANCE	N/A
09/12/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/12/2015	14:00	14:02	3	15	PREVENTIVE MAINTENANCE	N/A
09/13/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/13/2015	14:03	14:05	3	15	PREVENTIVE MAINTENANCE	N/A
09/14/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/14/2015	10:46	11:05	20	13	PROCESS DOWN	N/A
09/14/2015	14:06	14:08	3	15	PREVENTIVE MAINTENANCE	N/A
09/15/2015	05:56	06:01	6	13	PROCESS DOWN	N/A
09/15/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/15/2015	14:09	14:11	3	15	PREVENTIVE MAINTENANCE	N/A
09/16/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/16/2015	14:12	14:14	3	15	PREVENTIVE MAINTENANCE	N/A
09/17/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/17/2015	14:15	14:17	3	15	PREVENTIVE MAINTENANCE	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
09/18/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/18/2015	14:17	14:19	3	15	PREVENTIVE MAINTENANCE	N/A
09/19/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/19/2015	14:19	14:21	3	15	PREVENTIVE MAINTENANCE	N/A
09/20/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/20/2015	14:21	14:23	3	15	PREVENTIVE MAINTENANCE	N/A
09/21/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/21/2015	08:31	23:59	929	13	PROCESS DOWN	N/A
09/22/2015	00:00	01:08	69	13	PROCESS DOWN	N/A
09/22/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/22/2015	14:25	14:27	3	15	PREVENTIVE MAINTENANCE	N/A
09/23/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/23/2015	14:27	14:29	3	15	PREVENTIVE MAINTENANCE	N/A
09/24/2015	06:40	07:51	72	13	PROCESS DOWN	N/A
09/24/2015	14:29	14:31	3	15	PREVENTIVE MAINTENANCE	N/A
09/25/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/25/2015	14:31	14:33	3	15	PREVENTIVE MAINTENANCE	N/A
09/26/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/26/2015	14:33	14:35	3	15	PREVENTIVE MAINTENANCE	N/A
09/27/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/27/2015	14:35	14:37	3	15	PREVENTIVE MAINTENANCE	N/A
09/28/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/28/2015	07:24	15:50	507	13	PROCESS DOWN	N/A
09/29/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/29/2015	14:39	14:41	3	15	PREVENTIVE MAINTENANCE	N/A
09/30/2015	06:51	07:02	12	14	RECALIBRATION	N/A
09/30/2015	14:41	14:43	3	15	PREVENTIVE MAINTENANCE	N/A
10/01/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/01/2015	07:25	13:32	368	13	PROCESS DOWN	N/A
10/01/2015	14:43	14:45	3	15	PREVENTIVE MAINTENANCE	N/A
10/02/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/02/2015	14:45	14:47	3	15	PREVENTIVE MAINTENANCE	N/A
10/02/2015	20:41	23:09	149	13	PROCESS DOWN	N/A
10/03/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/03/2015	14:47	14:49	3	15	PREVENTIVE MAINTENANCE	N/A
10/04/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/04/2015	13:04	13:11	8	13	PROCESS DOWN	N/A
10/04/2015	14:49	14:51	3	15	PREVENTIVE MAINTENANCE	N/A
10/05/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/05/2015	07:36	07:55	20	13	PROCESS DOWN	N/A
10/05/2015	07:58	09:00	63	13	PROCESS DOWN	N/A
10/05/2015	14:52	14:54	3	15	PREVENTIVE MAINTENANCE	N/A
10/06/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/06/2015	07:15	07:43	29	13	PROCESS DOWN	N/A
10/06/2015	07:59	08:12	14	13	PROCESS DOWN	N/A
10/06/2015	09:07	17:58	532	13	PROCESS DOWN	N/A
10/07/2015	05:55	06:06	12	14	RECALIBRATION	N/A
10/07/2015	14:57	14:59	3	15	PREVENTIVE MAINTENANCE	N/A
10/08/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/08/2015	14:59	15:01	3	15	PREVENTIVE MAINTENANCE	N/A
10/09/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/09/2015	15:01	15:03	3	15	PREVENTIVE MAINTENANCE	N/A
10/10/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/10/2015	15:03	15:05	3	15	PREVENTIVE MAINTENANCE	N/A
10/11/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/11/2015	15:05	15:07	3	15	PREVENTIVE MAINTENANCE	N/A
10/11/2015	19:06	19:28	23	13	PROCESS DOWN	N/A
10/11/2015	19:50	19:51	2	13	PROCESS DOWN	N/A
10/11/2015	20:53	20:56	4	13	PROCESS DOWN	N/A
10/12/2015	05:27	14:54	568	13	PROCESS DOWN	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
10/12/2015	14:56	15:09	14	13	PROCESS DOWN	N/A
10/13/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/13/2015	10:25	21:54	690	13	PROCESS DOWN	N/A
10/14/2015	00:32	00:39	8	13	PROCESS DOWN	N/A
10/14/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/14/2015	15:11	15:13	3	15	PREVENTIVE MAINTENANCE	N/A
10/15/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/15/2015	15:13	15:15	3	15	PREVENTIVE MAINTENANCE	N/A
10/16/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/16/2015	15:15	15:17	3	15	PREVENTIVE MAINTENANCE	N/A
10/17/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/17/2015	15:17	15:19	3	15	PREVENTIVE MAINTENANCE	N/A
10/18/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/18/2015	15:19	15:21	3	15	PREVENTIVE MAINTENANCE	N/A
10/19/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/19/2015	08:29	10:42	134	13	PROCESS DOWN	N/A
10/19/2015	10:43	10:44	2	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
10/19/2015	10:45	13:40	176	13	PROCESS DOWN	N/A
10/19/2015	15:21	15:23	3	15	PREVENTIVE MAINTENANCE	N/A
10/20/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/20/2015	15:23	15:25	3	15	PREVENTIVE MAINTENANCE	N/A
10/21/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/21/2015	15:26	15:28	3	15	PREVENTIVE MAINTENANCE	N/A
10/22/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/22/2015	09:15	11:27	133	13	PROCESS DOWN	N/A
10/22/2015	11:38	11:44	7	13	PROCESS DOWN	N/A
10/22/2015	15:28	15:30	3	15	PREVENTIVE MAINTENANCE	N/A
10/23/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/23/2015	09:54	11:23	90	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/23/2015	11:25	11:36	12	14	RECALIBRATION	N/A
10/23/2015	15:30	15:32	3	15	PREVENTIVE MAINTENANCE	N/A
10/24/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/24/2015	08:30	15:14	405	13	PROCESS DOWN	N/A
10/24/2015	15:33	15:35	3	15	PREVENTIVE MAINTENANCE	N/A
10/24/2015	19:23	19:26	4	13	PROCESS DOWN	N/A
10/24/2015	20:05	20:07	3	13	PROCESS DOWN	N/A
10/25/2015	05:48	13:35	468	13	PROCESS DOWN	N/A
10/25/2015	15:35	15:37	3	15	PREVENTIVE MAINTENANCE	N/A
10/25/2015	19:59	20:37	39	13	PROCESS DOWN	N/A
10/25/2015	23:21	23:59	39	13	PROCESS DOWN	N/A
10/26/2015	00:00	00:18	19	13	PROCESS DOWN	N/A
10/26/2015	02:52	03:51	60	13	PROCESS DOWN	N/A
10/26/2015	04:59	05:22	24	13	PROCESS DOWN	N/A
10/26/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/26/2015	15:37	15:39	3	15	PREVENTIVE MAINTENANCE	N/A
10/27/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/27/2015	15:39	15:41	3	15	PREVENTIVE MAINTENANCE	N/A
10/28/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/28/2015	15:41	15:43	3	15	PREVENTIVE MAINTENANCE	N/A
10/29/2015	03:37	23:59	1223	13	PROCESS DOWN	N/A
10/30/2015	00:00	06:32	393	13	PROCESS DOWN	N/A
10/30/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/30/2015	15:45	15:47	3	15	PREVENTIVE MAINTENANCE	N/A
10/31/2015	06:51	07:02	12	14	RECALIBRATION	N/A
10/31/2015	15:47	15:49	3	15	PREVENTIVE MAINTENANCE	N/A
11/01/2015	05:51	06:02	12	14	RECALIBRATION	N/A
11/01/2015	14:49	14:51	3	15	PREVENTIVE MAINTENANCE	N/A
11/02/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/02/2015	14:51	14:53	3	15	PREVENTIVE MAINTENANCE	N/A
11/03/2015	05:55	06:06	12	14	RECALIBRATION	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
11/03/2015	14:54	14:56	3	15	PREVENTIVE MAINTENANCE	N/A
11/04/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/04/2015	14:57	14:59	3	15	PREVENTIVE MAINTENANCE	N/A
11/05/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/05/2015	07:31	10:44	194	13	PROCESS DOWN	N/A
11/05/2015	11:00	12:44	105	13	PROCESS DOWN	N/A
11/05/2015	14:59	15:01	3	15	PREVENTIVE MAINTENANCE	N/A
11/06/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/06/2015	09:43	10:47	65	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/06/2015	15:02	15:04	3	15	PREVENTIVE MAINTENANCE	N/A
11/07/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/07/2015	15:05	15:07	3	15	PREVENTIVE MAINTENANCE	N/A
11/08/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/08/2015	15:08	15:10	3	15	PREVENTIVE MAINTENANCE	N/A
11/09/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/09/2015	07:47	15:41	475	13	PROCESS DOWN	N/A
11/10/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/10/2015	15:12	15:14	3	15	PREVENTIVE MAINTENANCE	N/A
11/11/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/11/2015	15:14	15:16	3	15	PREVENTIVE MAINTENANCE	N/A
11/12/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/12/2015	15:16	15:18	3	15	PREVENTIVE MAINTENANCE	N/A
11/12/2015	20:57	21:26	30	13	PROCESS DOWN	N/A
11/13/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/13/2015	15:18	15:20	3	15	PREVENTIVE MAINTENANCE	N/A
11/14/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/14/2015	15:20	15:22	3	15	PREVENTIVE MAINTENANCE	N/A
11/15/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/15/2015	15:23	15:25	3	15	PREVENTIVE MAINTENANCE	N/A
11/16/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/16/2015	07:27	20:06	760	13	PROCESS DOWN	N/A
11/17/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/17/2015	15:28	15:30	3	15	PREVENTIVE MAINTENANCE	N/A
11/18/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/18/2015	15:30	15:32	3	15	PREVENTIVE MAINTENANCE	N/A
11/19/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/19/2015	15:32	15:34	3	15	PREVENTIVE MAINTENANCE	N/A
11/20/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/20/2015	09:14	10:01	48	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/20/2015	15:34	15:36	3	15	PREVENTIVE MAINTENANCE	N/A
11/21/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/21/2015	15:36	15:38	3	15	PREVENTIVE MAINTENANCE	N/A
11/22/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/22/2015	15:38	15:40	3	15	PREVENTIVE MAINTENANCE	N/A
11/23/2015	04:23	21:01	999	13	PROCESS DOWN	N/A
11/23/2015	22:02	22:16	15	13	PROCESS DOWN	N/A
11/24/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/24/2015	10:25	10:37	13	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
11/24/2015	10:38	11:03	26	13	PROCESS DOWN	N/A
11/24/2015	11:04	11:22	19	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
11/24/2015	11:23	12:15	53	13	PROCESS DOWN	N/A
11/24/2015	15:41	15:43	3	15	PREVENTIVE MAINTENANCE	N/A
11/25/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/25/2015	15:44	15:46	3	15	PREVENTIVE MAINTENANCE	N/A
11/26/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/26/2015	15:46	15:48	3	15	PREVENTIVE MAINTENANCE	N/A
11/27/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/27/2015	15:48	15:50	3	15	PREVENTIVE MAINTENANCE	N/A
11/28/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/28/2015	15:50	15:52	3	15	PREVENTIVE MAINTENANCE	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
11/29/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/29/2015	15:52	15:54	3	15	PREVENTIVE MAINTENANCE	N/A
11/30/2015	05:55	06:06	12	14	RECALIBRATION	N/A
11/30/2015	08:47	09:01	15	13	PROCESS DOWN	N/A
11/30/2015	15:54	15:56	3	15	PREVENTIVE MAINTENANCE	N/A
12/01/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/01/2015	07:47	09:01	75	13	PROCESS DOWN	N/A
12/01/2015	15:56	15:58	3	15	PREVENTIVE MAINTENANCE	N/A
12/02/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/02/2015	15:58	16:00	3	15	PREVENTIVE MAINTENANCE	N/A
12/03/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/03/2015	16:00	16:02	3	15	PREVENTIVE MAINTENANCE	N/A
12/04/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/04/2015	10:46	11:52	67	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/04/2015	16:02	16:04	3	15	PREVENTIVE MAINTENANCE	N/A
12/05/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/05/2015	16:05	16:07	3	15	PREVENTIVE MAINTENANCE	N/A
12/06/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/06/2015	16:08	16:10	3	15	PREVENTIVE MAINTENANCE	N/A
12/07/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/07/2015	16:10	16:12	3	15	PREVENTIVE MAINTENANCE	N/A
12/08/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/08/2015	16:12	16:14	3	15	PREVENTIVE MAINTENANCE	N/A
12/09/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/09/2015	12:48	12:50	3	13	PROCESS DOWN	N/A
12/09/2015	13:00	13:13	14	13	PROCESS DOWN	N/A
12/09/2015	16:14	16:16	3	15	PREVENTIVE MAINTENANCE	N/A
12/10/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/10/2015	16:16	16:18	3	15	PREVENTIVE MAINTENANCE	N/A
12/11/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/11/2015	16:18	16:20	3	15	PREVENTIVE MAINTENANCE	N/A
12/12/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/12/2015	16:20	16:22	3	15	PREVENTIVE MAINTENANCE	N/A
12/13/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/13/2015	16:22	16:24	3	15	PREVENTIVE MAINTENANCE	N/A
12/14/2015	05:14	14:13	540	13	PROCESS DOWN	N/A
12/14/2015	16:25	16:27	3	15	PREVENTIVE MAINTENANCE	N/A
12/15/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/15/2015	16:28	16:30	3	15	PREVENTIVE MAINTENANCE	N/A
12/16/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/16/2015	16:30	16:32	3	15	PREVENTIVE MAINTENANCE	N/A
12/17/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/17/2015	16:32	16:34	3	15	PREVENTIVE MAINTENANCE	N/A
12/18/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/18/2015	16:34	16:36	3	15	PREVENTIVE MAINTENANCE	N/A
12/19/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/19/2015	16:36	16:38	3	15	PREVENTIVE MAINTENANCE	N/A
12/20/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/20/2015	16:38	16:40	3	15	PREVENTIVE MAINTENANCE	N/A
12/21/2015	05:55	05:58	4	14	RECALIBRATION	N/A
12/21/2015	05:59	13:58	480	13	PROCESS DOWN	N/A
12/21/2015	16:40	16:42	3	15	PREVENTIVE MAINTENANCE	N/A
12/22/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/22/2015	10:33	10:33	1	13	PROCESS DOWN	N/A
12/22/2015	16:42	16:44	3	15	PREVENTIVE MAINTENANCE	N/A
12/23/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/23/2015	16:44	16:46	3	15	PREVENTIVE MAINTENANCE	N/A
12/24/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/24/2015	16:46	16:48	3	15	PREVENTIVE MAINTENANCE	N/A
12/25/2015	05:55	06:06	12	14	RECALIBRATION	N/A

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
12/25/2015	16:48	16:50	3	15	PREVENTIVE MAINTENANCE	N/A
12/26/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/26/2015	12:47	13:01	15	13	PROCESS DOWN	N/A
12/26/2015	13:17	13:31	15	13	PROCESS DOWN	N/A
12/26/2015	16:50	16:52	3	15	PREVENTIVE MAINTENANCE	N/A
12/27/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/27/2015	16:52	16:54	3	15	PREVENTIVE MAINTENANCE	N/A
12/28/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/28/2015	16:54	16:56	3	15	PREVENTIVE MAINTENANCE	N/A
12/29/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/29/2015	16:56	16:58	3	15	PREVENTIVE MAINTENANCE	N/A
12/30/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/30/2015	16:58	17:00	3	15	PREVENTIVE MAINTENANCE	N/A
12/31/2015	05:55	06:06	12	14	RECALIBRATION	N/A
12/31/2015	17:00	17:02	3	15	PREVENTIVE MAINTENANCE	N/A

INCIDENT SUMMARY: INVALID CO (ppmvd)

CODE	HOURS	PERCENT	EXPLANATION
11	0.92	0.27	EXCESS DRIFT PRIMARY MONITOR
13	275.57	81.75	PROCESS DOWN
14	37.72	11.19	RECALIBRATION
15	8.45	2.51	PREVENTIVE MAINTENANCE
16	0.02	0.00	PRIMARY MONITOR MALFUNCTION
18	4.68	1.39	DATA HANDLING SYSTEM MALFUNCTION
19	0.52	0.15	SAMPLE INTERFACE MALFUNCTION
20	9.22	2.73	CORRECTIVE MAINTENANCE

TOTAL HOURS: 337.08

184 days = 4416

− 275.57

4140.43

$$\frac{4140.43 - 61.53}{4140.43} \times 100 = 98.51\%$$

CO @7% AVAILABILITY AND VALIDITY

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 09:59
PERIOD: 07/01/2015 - 12/31/2015

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
07/01/2015	24.00	10.4	0.00
07/02/2015	24.00	9.5	0.00
07/03/2015	21.00	24.8	0.00
07/04/2015	24.00	21.8	0.00
07/05/2015	24.00	4.9	0.00
07/06/2015	23.50	2.8	0.00
07/07/2015	20.75	16.3	0.00
07/08/2015	24.00	22.4	0.00
07/09/2015	24.00	16.9	0.00
07/10/2015	24.00	4.0	0.00
07/11/2015	24.00	0.8	0.00
07/12/2015	24.00	0.6	0.00
07/13/2015	18.73	2.6	0.00
07/14/2015	24.00	1.5	0.00
07/15/2015	24.00	0.3	0.00
07/16/2015	24.00	5.4	0.00
07/17/2015	24.00	4.0	0.00
07/18/2015	24.00	4.8	0.00
07/19/2015	24.00	4.0	0.00
07/20/2015	13.68	29.1	0.00
07/21/2015	24.00	1.7	0.00
07/22/2015	24.00	0.3	0.00
07/23/2015	24.00	0.1	0.00
07/24/2015	24.00	0.2	0.00
07/25/2015	24.00	0.3	0.00
07/26/2015	24.00	0.0	0.00
07/27/2015	24.00	0.1	0.00
07/28/2015	22.13	0.0	0.00
07/29/2015	24.00	6.0	0.00
07/30/2015	23.73	10.3	0.00
07/31/2015	21.35	11.7	0.00
08/01/2015	24.00	7.3	0.00
08/02/2015	24.00	6.9	0.00
08/03/2015	17.07	8.8	0.00
08/04/2015	23.67	8.2	0.00
08/05/2015	24.00	9.5	0.00
08/06/2015	23.70	9.2	0.00
08/07/2015	24.00	4.3	0.00
08/08/2015	22.00	2.5	1.08
08/09/2015	23.55	0.6	0.40

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
08/10/2015	17.40	7.4	0.00
08/11/2015	22.90	3.4	0.00
08/12/2015	24.00	10.8	0.00
08/13/2015	23.83	10.0	0.00
08/14/2015	24.00	10.0	0.00
08/15/2015	24.00	4.6	0.00
08/16/2015	24.00	5.8	0.00
08/17/2015	13.63	5.5	0.00
08/18/2015	20.77	14.4	0.00
08/19/2015	24.00	16.6	0.00
08/20/2015	21.65	7.6	0.00
08/21/2015	20.85	6.9	0.00
08/22/2015	24.00	5.3	0.00
08/23/2015	23.87	4.7	0.00
08/24/2015	16.83	0.0	0.00
08/25/2015	24.00	5.4	0.00
08/26/2015	20.67	9.4	0.00
08/27/2015	23.02	2.9	0.45
08/28/2015	24.00	11.5	0.00
08/29/2015	24.00	9.6	0.00
08/30/2015	24.00	6.6	0.00
08/31/2015	18.05	4.7	0.00
09/01/2015	20.90	4.3	0.00
09/02/2015	24.00	6.9	0.00
09/03/2015	22.82	2.5	0.00
09/04/2015	24.00	12.0	0.00
09/05/2015	24.00	6.2	0.00
09/06/2015	23.97	0.7	0.00
09/07/2015	24.00	0.8	0.00
09/08/2015	18.92	5.9	0.00
09/09/2015	24.00	6.7	0.00
09/10/2015	16.87	11.6	1.88
09/11/2015	24.00	14.5	0.00
09/12/2015	24.00	13.4	0.00
09/13/2015	24.00	4.8	0.00
09/14/2015	23.67	4.2	0.00
09/15/2015	23.90	12.3	0.00
09/16/2015	24.00	16.3	0.00
09/17/2015	24.00	14.2	0.00
09/18/2015	24.00	9.8	0.00
09/19/2015	24.00	4.7	0.00
09/20/2015	24.00	2.7	0.00
09/21/2015	8.52	0.2	0.00
09/22/2015	22.85	14.2	0.00
09/23/2015	24.00	18.3	0.00
09/24/2015	22.80	6.7	0.00
09/25/2015	24.00	11.8	0.00
09/26/2015	24.00	6.8	0.00
09/27/2015	24.00	1.5	0.00

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
09/28/2015	15.55	3.5	0.00
09/29/2015	24.00	14.3	0.00
09/30/2015	24.00	9.7	0.00
10/01/2015	17.87	1.6	0.00
10/02/2015	21.52	23.3	0.00
10/03/2015	24.00	14.2	0.00
10/04/2015	23.87	12.2	0.00
10/05/2015	22.62	7.1	0.00
10/06/2015	14.42	19.1	0.00
10/07/2015	24.00	11.2	0.00
10/08/2015	24.00	26.1	0.00
10/09/2015	24.00	28.2	0.00
10/10/2015	24.00	37.7	0.00
10/11/2015	23.52	9.0	0.00
10/12/2015	14.30	19.4	0.00
10/13/2015	12.50	15.9	0.00
10/14/2015	23.87	33.7	0.00
10/15/2015	24.00	18.1	0.00
10/16/2015	24.00	10.2	0.00
10/17/2015	24.00	16.8	0.00
10/18/2015	24.00	18.1	0.00
10/19/2015	18.80	9.9	0.03
10/20/2015	24.00	14.6	0.00
10/21/2015	24.00	22.6	0.00
10/22/2015	21.67	11.8	0.00
10/23/2015	24.00	18.7	0.00
10/24/2015	17.13	38.0	0.00
10/25/2015	14.90	0.0	0.00
10/26/2015	22.28	0.0	0.00
10/27/2015	24.00	0.0	0.00
10/28/2015	24.00	0.0	0.00
10/29/2015	3.62	17.1	0.00
10/30/2015	17.45	29.0	0.00
10/31/2015	24.00	21.8	0.00
11/01/2015	24.00	5.1	0.00
11/02/2015	24.00	12.1	0.00
11/03/2015	24.00	9.8	0.00
11/04/2015	24.00	5.1	0.00
11/05/2015	19.02	8.5	0.00
11/06/2015	24.00	26.4	0.00
11/07/2015	24.00	5.2	0.00
11/08/2015	24.00	3.1	0.00
11/09/2015	16.08	16.0	0.00
11/10/2015	24.00	15.6	0.00
11/11/2015	24.00	3.0	0.00
11/12/2015	23.50	3.8	0.00
11/13/2015	24.00	6.4	0.00
11/14/2015	24.00	1.5	0.00
11/15/2015	24.00	2.6	0.00

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
11/16/2015	11.33	9.5	0.00
11/17/2015	24.00	33.0	0.00
11/18/2015	24.00	45.4	0.00
11/19/2015	24.00	22.2	0.00
11/20/2015	24.00	18.1	0.00
11/21/2015	24.00	1.9	0.00
11/22/2015	24.00	2.6	0.00
11/23/2015	7.10	31.4	0.00
11/24/2015	22.25	26.2	0.52
11/25/2015	24.00	19.8	0.00
11/26/2015	24.00	9.1	0.00
11/27/2015	24.00	1.4	0.00
11/28/2015	24.00	7.4	0.00
11/29/2015	24.00	6.0	0.00
11/30/2015	23.75	19.6	0.00
12/01/2015	22.75	6.6	0.00
12/02/2015	24.00	23.4	0.00
12/03/2015	24.00	12.5	0.00
12/04/2015	24.00	33.3	0.00
12/05/2015	24.00	28.4	0.00
12/06/2015	24.00	16.5	0.00
12/07/2015	24.00	32.1	0.00
12/08/2015	24.00	17.5	0.00
12/09/2015	23.72	18.5	0.00
12/10/2015	24.00	17.0	0.00
12/11/2015	24.00	16.1	0.00
12/12/2015	24.00	9.2	0.00
12/13/2015	24.00	6.4	0.00
12/14/2015	15.00	23.1	0.00
12/15/2015	24.00	18.5	0.00
12/16/2015	24.00	22.5	0.00
12/17/2015	24.00	21.4	0.00
12/18/2015	24.00	33.4	0.00
12/19/2015	24.00	41.1	0.00
12/20/2015	24.00	37.9	0.00
12/21/2015	16.00	24.0	0.00
12/22/2015	23.98	24.8	0.00
12/23/2015	24.00	24.3	0.00
12/24/2015	24.00	20.9	0.00
12/25/2015	24.00	1.2	0.00
12/26/2015	23.50	56.8	0.00
12/27/2015	24.00	16.4	0.00
12/28/2015	24.00	21.9	0.00
12/29/2015	24.00	15.0	0.00
12/30/2015	24.00	22.4	0.00
12/31/2015	24.00	16.5	0.00

	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
AVERAGE		12.2	
TOTAL	4133.38		4.37
AVAILABILITY		98.64	

OPACITY AVAILABILITY AND VALIDITY

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 10:08
PERIOD: 07/01/2015 - 12/31/2015

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
07/01/2015	24.00	0.65	0.00
07/02/2015	24.00	5.58	0.00
07/03/2015	21.00	8.34	0.00
07/04/2015	24.00	7.72	0.00
07/05/2015	24.00	7.37	0.00
07/06/2015	23.50	7.23	0.00
07/07/2015	20.75	7.24	0.00
07/08/2015	24.00	0.00	0.00
07/09/2015	24.00	0.00	0.00
07/10/2015	24.00	0.00	0.00
07/11/2015	24.00	0.00	0.00
07/12/2015	24.00	0.00	0.00
07/13/2015	18.73	0.03	0.00
07/14/2015	24.00	0.00	0.00
07/15/2015	24.00	0.00	0.00
07/16/2015	24.00	0.00	0.00
07/17/2015	24.00	0.00	0.00
07/18/2015	24.00	0.00	0.00
07/19/2015	24.00	0.00	0.00
07/20/2015	13.68	0.00	0.00
07/21/2015	24.00	0.00	0.00
07/22/2015	24.00	0.00	0.00
07/23/2015	24.00	0.00	0.00
07/24/2015	24.00	0.00	0.00
07/25/2015	24.00	0.00	0.00
07/26/2015	24.00	0.00	0.00
07/27/2015	24.00	0.00	0.00
07/28/2015	22.13	0.01	0.00
07/29/2015	24.00	0.00	0.00
07/30/2015	23.73	0.00	0.00
07/31/2015	21.35	0.00	0.00
08/01/2015	24.00	0.00	0.00
08/02/2015	24.00	0.00	0.00
08/03/2015	17.07	0.00	0.00
08/04/2015	23.67	0.00	0.00
08/05/2015	24.00	0.00	0.00
08/06/2015	23.70	0.00	0.00
08/07/2015	24.00	0.00	0.00
08/08/2015	22.00	0.00	1.08
08/09/2015	23.55	0.00	0.40

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
08/10/2015	17.40	0.00	0.00
08/11/2015	22.90	0.00	0.00
08/12/2015	24.00	0.00	0.00
08/13/2015	23.83	0.00	0.00
08/14/2015	24.00	0.00	0.00
08/15/2015	24.00	0.00	0.00
08/16/2015	24.00	0.00	0.00
08/17/2015	13.63	0.00	0.00
08/18/2015	20.77	0.00	0.00
08/19/2015	24.00	0.00	0.00
08/20/2015	21.65	0.00	0.00
08/21/2015	20.85	0.00	0.00
08/22/2015	24.00	0.00	0.00
08/23/2015	23.87	0.00	0.00
08/24/2015	16.83	0.00	0.00
08/25/2015	24.00	0.00	0.00
08/26/2015	20.67	0.00	0.00
08/27/2015	23.02	0.00	0.45
08/28/2015	24.00	0.00	0.00
08/29/2015	24.00	0.00	0.00
08/30/2015	24.00	0.00	0.00
08/31/2015	18.05	0.00	0.00
09/01/2015	20.90	0.00	0.00
09/02/2015	24.00	0.00	0.00
09/03/2015	22.82	0.00	0.00
09/04/2015	24.00	0.00	0.00
09/05/2015	24.00	0.00	0.00
09/06/2015	23.97	0.00	0.00
09/07/2015	24.00	0.00	0.00
09/08/2015	18.92	0.00	0.00
09/09/2015	24.00	0.00	0.00
09/10/2015	16.87	0.00	1.88
09/11/2015	24.00	1.23	0.00
09/12/2015	24.00	1.42	0.00
09/13/2015	24.00	0.88	0.00
09/14/2015	23.67	2.26	0.00
09/15/2015	23.90	1.55	0.00
09/16/2015	24.00	0.96	0.00
09/17/2015	24.00	0.55	0.00
09/18/2015	24.00	0.99	0.00
09/19/2015	24.00	0.84	0.00
09/20/2015	24.00	0.48	0.00
09/21/2015	8.52	1.38	0.00
09/22/2015	22.85	0.08	0.00
09/23/2015	24.00	0.40	0.00
09/24/2015	22.80	0.43	0.00
09/25/2015	24.00	0.59	0.00
09/26/2015	24.00	0.62	0.00
09/27/2015	24.00	1.63	0.00

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
09/28/2015	15.55	1.38	0.00
09/29/2015	24.00	0.21	0.00
09/30/2015	24.00	0.04	0.00
10/01/2015	17.87	0.08	0.00
10/02/2015	21.52	0.15	0.00
10/03/2015	24.00	0.11	0.00
10/04/2015	23.87	0.36	0.00
10/05/2015	22.62	0.82	0.00
10/06/2015	14.42	2.83	0.00
10/07/2015	24.00	3.18	0.00
10/08/2015	24.00	1.62	0.00
10/09/2015	24.00	2.09	0.00
10/10/2015	24.00	2.84	0.00
10/11/2015	23.52	3.23	0.00
10/12/2015	14.30	3.27	0.00
10/13/2015	12.50	3.37	0.00
10/14/2015	23.87	3.39	0.00
10/15/2015	24.00	3.65	0.00
10/16/2015	24.00	2.85	0.00
10/17/2015	24.00	4.24	0.00
10/18/2015	24.00	6.77	0.00
10/19/2015	18.80	5.71	0.03
10/20/2015	24.00	0.76	0.00
10/21/2015	24.00	1.39	0.00
10/22/2015	21.67	0.15	0.00
10/23/2015	24.00	2.53	0.00
10/24/2015	17.13	7.36	0.00
10/25/2015	14.90	5.07	0.00
10/26/2015	22.28	3.98	0.00
10/27/2015	24.00	4.17	0.00
10/28/2015	24.00	2.39	0.00
10/29/2015	3.62	2.17	0.00
10/30/2015	17.45	3.01	0.00
10/31/2015	24.00	4.14	0.00
11/01/2015	24.00	2.39	0.00
11/02/2015	24.00	2.12	0.00
11/03/2015	24.00	4.27	0.00
11/04/2015	24.00	5.22	0.00
11/05/2015	19.02	4.44	0.00
11/06/2015	24.00	1.43	0.00
11/07/2015	24.00	4.16	0.00
11/08/2015	24.00	5.54	0.00
11/09/2015	16.08	7.58	0.00
11/10/2015	24.00	4.38	0.00
11/11/2015	24.00	2.61	0.00
11/12/2015	23.50	3.11	0.00
11/13/2015	24.00	4.24	0.00
11/14/2015	24.00	6.49	0.00
11/15/2015	24.00	6.71	0.00

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
11/16/2015	11.33	7.24	0.00
11/17/2015	24.00	6.85	0.00
11/18/2015	24.00	5.27	0.00
11/19/2015	24.00	2.24	0.00
11/20/2015	24.00	4.26	0.00
11/21/2015	24.00	5.89	0.00
11/22/2015	24.00	4.25	0.00
11/23/2015	7.10	4.69	0.00
11/24/2015	22.25	7.23	0.52
11/25/2015	24.00	7.60	0.00
11/26/2015	24.00	7.08	0.00
11/27/2015	24.00	2.36	0.00
11/28/2015	24.00	4.60	0.00
11/29/2015	24.00	5.80	0.00
11/30/2015	23.75	6.28	0.00
12/01/2015	22.75	5.35	0.00
12/02/2015	24.00	5.09	0.00
12/03/2015	24.00	4.81	0.00
12/04/2015	24.00	6.85	0.00
12/05/2015	24.00	6.24	0.00
12/06/2015	24.00	6.10	0.00
12/07/2015	24.00	6.26	0.00
12/08/2015	24.00	4.74	0.00
12/09/2015	23.72	5.19	0.00
12/10/2015	24.00	4.57	0.00
12/11/2015	24.00	4.70	0.00
12/12/2015	24.00	5.22	0.00
12/13/2015	24.00	3.90	0.00
12/14/2015	15.00	2.64	0.00
12/15/2015	24.00	2.50	0.00
12/16/2015	24.00	4.49	0.00
12/17/2015	24.00	3.39	0.00
12/18/2015	24.00	3.96	0.00
12/19/2015	24.00	6.24	0.00
12/20/2015	24.00	7.11	0.00
12/21/2015	16.00	3.00	0.00
12/22/2015	23.98	2.76	0.00
12/23/2015	24.00	5.26	0.00
12/24/2015	24.00	1.30	0.00
12/25/2015	24.00	3.49	0.00
12/26/2015	23.50	2.35	0.00
12/27/2015	24.00	2.24	0.00
12/28/2015	24.00	2.26	0.00
12/29/2015	24.00	3.88	0.00
12/30/2015	24.00	5.81	0.00
12/31/2015	24.00	5.76	0.00

	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
TOTAL	4133.38		4.37
AVAILABILITY		97.52	

Continuous Opacty Monitoring Reports

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 10:11
PERIOD: 07/01/2015 - 12/31/2015

INCIDENT: HI 1-HR OPACITY (%)

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
07/01/2015	NO	INCIDENT	OCCURRED							
07/02/2015	NO	INCIDENT	OCCURRED							
07/03/2015	NO	INCIDENT	OCCURRED							
07/04/2015	NO	INCIDENT	OCCURRED							
07/05/2015	NO	INCIDENT	OCCURRED							
07/06/2015	NO	INCIDENT	OCCURRED							
07/07/2015	NO	INCIDENT	OCCURRED							
07/08/2015	NO	INCIDENT	OCCURRED							
07/09/2015	NO	INCIDENT	OCCURRED							
07/10/2015	NO	INCIDENT	OCCURRED							
07/11/2015	NO	INCIDENT	OCCURRED							
07/12/2015	NO	INCIDENT	OCCURRED							
07/13/2015	NO	INCIDENT	OCCURRED							
07/14/2015	NO	INCIDENT	OCCURRED							
07/15/2015	NO	INCIDENT	OCCURRED							
07/16/2015	NO	INCIDENT	OCCURRED							
07/17/2015	NO	INCIDENT	OCCURRED							
07/18/2015	NO	INCIDENT	OCCURRED							
07/19/2015	NO	INCIDENT	OCCURRED							
07/20/2015	NO	INCIDENT	OCCURRED							
07/21/2015	NO	INCIDENT	OCCURRED							
07/22/2015	NO	INCIDENT	OCCURRED							
07/23/2015	NO	INCIDENT	OCCURRED							
07/24/2015	NO	INCIDENT	OCCURRED							
07/25/2015	NO	INCIDENT	OCCURRED							
07/26/2015	NO	INCIDENT	OCCURRED							
07/27/2015	NO	INCIDENT	OCCURRED							
07/28/2015	NO	INCIDENT	OCCURRED							
07/29/2015	NO	INCIDENT	OCCURRED							
07/30/2015	NO	INCIDENT	OCCURRED							
07/31/2015	NO	INCIDENT	OCCURRED							
08/01/2015	NO	INCIDENT	OCCURRED							
08/02/2015	NO	INCIDENT	OCCURRED							
08/03/2015	NO	INCIDENT	OCCURRED							
08/04/2015	NO	INCIDENT	OCCURRED							
08/05/2015	NO	INCIDENT	OCCURRED							
08/06/2015	NO	INCIDENT	OCCURRED							
08/07/2015	NO	INCIDENT	OCCURRED							
08/08/2015	NO	INCIDENT	OCCURRED							
08/09/2015	NO	INCIDENT	OCCURRED							
08/10/2015	NO	INCIDENT	OCCURRED							
08/11/2015	NO	INCIDENT	OCCURRED							
08/12/2015	NO	INCIDENT	OCCURRED							
08/13/2015	NO	INCIDENT	OCCURRED							
08/14/2015	NO	INCIDENT	OCCURRED							
08/15/2015	NO	INCIDENT	OCCURRED							
08/16/2015	NO	INCIDENT	OCCURRED							
08/17/2015	NO	INCIDENT	OCCURRED							
08/18/2015	NO	INCIDENT	OCCURRED							
08/19/2015	NO	INCIDENT	OCCURRED							

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
08/20/2015	NO	INCIDENT	OCCURRED							
08/21/2015	NO	INCIDENT	OCCURRED							
08/22/2015	NO	INCIDENT	OCCURRED							
08/23/2015	NO	INCIDENT	OCCURRED							
08/24/2015	NO	INCIDENT	OCCURRED							
08/25/2015	NO	INCIDENT	OCCURRED							
08/26/2015	NO	INCIDENT	OCCURRED							
08/27/2015	NO	INCIDENT	OCCURRED							
08/28/2015	NO	INCIDENT	OCCURRED							
08/29/2015	NO	INCIDENT	OCCURRED							
08/30/2015	NO	INCIDENT	OCCURRED							
08/31/2015	NO	INCIDENT	OCCURRED							
09/01/2015	NO	INCIDENT	OCCURRED							
09/02/2015	NO	INCIDENT	OCCURRED							
09/03/2015	NO	INCIDENT	OCCURRED							
09/04/2015	NO	INCIDENT	OCCURRED							
09/05/2015	NO	INCIDENT	OCCURRED							
09/06/2015	NO	INCIDENT	OCCURRED							
09/07/2015	NO	INCIDENT	OCCURRED							
09/08/2015	NO	INCIDENT	OCCURRED							
09/09/2015	NO	INCIDENT	OCCURRED							
09/10/2015	NO	INCIDENT	OCCURRED							
09/11/2015	NO	INCIDENT	OCCURRED							
09/12/2015	NO	INCIDENT	OCCURRED							
09/13/2015	NO	INCIDENT	OCCURRED							
09/14/2015	NO	INCIDENT	OCCURRED							
09/15/2015	NO	INCIDENT	OCCURRED							
09/16/2015	NO	INCIDENT	OCCURRED							
09/17/2015	NO	INCIDENT	OCCURRED							
09/18/2015	NO	INCIDENT	OCCURRED							
09/19/2015	NO	INCIDENT	OCCURRED							
09/20/2015	NO	INCIDENT	OCCURRED							
09/21/2015	NO	INCIDENT	OCCURRED							
09/22/2015	NO	INCIDENT	OCCURRED							
09/23/2015	NO	INCIDENT	OCCURRED							
09/24/2015	NO	INCIDENT	OCCURRED							
09/25/2015	NO	INCIDENT	OCCURRED							
09/26/2015	NO	INCIDENT	OCCURRED							
09/27/2015	NO	INCIDENT	OCCURRED							
09/28/2015	NO	INCIDENT	OCCURRED							
09/29/2015	NO	INCIDENT	OCCURRED							
09/30/2015	NO	INCIDENT	OCCURRED							
10/01/2015	NO	INCIDENT	OCCURRED							
10/02/2015	NO	INCIDENT	OCCURRED							
10/03/2015	NO	INCIDENT	OCCURRED							
10/04/2015	NO	INCIDENT	OCCURRED							
10/05/2015	NO	INCIDENT	OCCURRED							
10/06/2015	NO	INCIDENT	OCCURRED							
10/07/2015	NO	INCIDENT	OCCURRED							
10/08/2015	NO	INCIDENT	OCCURRED							
10/09/2015	NO	INCIDENT	OCCURRED							
10/10/2015	NO	INCIDENT	OCCURRED							
10/11/2015	NO	INCIDENT	OCCURRED							
10/12/2015	NO	INCIDENT	OCCURRED							
10/13/2015	NO	INCIDENT	OCCURRED							
10/14/2015	NO	INCIDENT	OCCURRED							
10/15/2015	NO	INCIDENT	OCCURRED							
10/16/2015	NO	INCIDENT	OCCURRED							
10/17/2015	NO	INCIDENT	OCCURRED							
10/18/2015	NO	INCIDENT	OCCURRED							

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
10/19/2015	NO	INCIDENT	OCCURRED							
10/20/2015	NO	INCIDENT	OCCURRED							
10/21/2015	NO	INCIDENT	OCCURRED							
10/22/2015	NO	INCIDENT	OCCURRED							
10/23/2015	NO	INCIDENT	OCCURRED							
10/24/2015	NO	INCIDENT	OCCURRED							
10/25/2015	NO	INCIDENT	OCCURRED							
10/26/2015	NO	INCIDENT	OCCURRED							
10/27/2015	NO	INCIDENT	OCCURRED							
10/28/2015	NO	INCIDENT	OCCURRED							
10/29/2015	NO	INCIDENT	OCCURRED							
10/30/2015	NO	INCIDENT	OCCURRED							
10/31/2015	NO	INCIDENT	OCCURRED							
11/01/2015	NO	INCIDENT	OCCURRED							
11/02/2015	NO	INCIDENT	OCCURRED							
11/03/2015	NO	INCIDENT	OCCURRED							
11/04/2015	NO	INCIDENT	OCCURRED							
11/05/2015	NO	INCIDENT	OCCURRED							
11/06/2015	NO	INCIDENT	OCCURRED							
11/07/2015	NO	INCIDENT	OCCURRED							
11/08/2015	NO	INCIDENT	OCCURRED							
11/09/2015	NO	INCIDENT	OCCURRED							
11/10/2015	NO	INCIDENT	OCCURRED							
11/11/2015	NO	INCIDENT	OCCURRED							
11/12/2015	NO	INCIDENT	OCCURRED							
11/13/2015	NO	INCIDENT	OCCURRED							
11/14/2015	NO	INCIDENT	OCCURRED							
11/15/2015	NO	INCIDENT	OCCURRED							
11/16/2015	NO	INCIDENT	OCCURRED							
11/17/2015	NO	INCIDENT	OCCURRED							
11/18/2015	NO	INCIDENT	OCCURRED							
11/19/2015	NO	INCIDENT	OCCURRED							
11/20/2015	NO	INCIDENT	OCCURRED							
11/21/2015	NO	INCIDENT	OCCURRED							
11/22/2015	NO	INCIDENT	OCCURRED							
11/23/2015	NO	INCIDENT	OCCURRED							
11/24/2015	NO	INCIDENT	OCCURRED							
11/25/2015	NO	INCIDENT	OCCURRED							
11/26/2015	NO	INCIDENT	OCCURRED							
11/27/2015	NO	INCIDENT	OCCURRED							
11/28/2015	NO	INCIDENT	OCCURRED							
11/29/2015	NO	INCIDENT	OCCURRED							
11/30/2015	NO	INCIDENT	OCCURRED							
12/01/2015	NO	INCIDENT	OCCURRED							
12/02/2015	NO	INCIDENT	OCCURRED							
12/03/2015	NO	INCIDENT	OCCURRED							
12/04/2015	NO	INCIDENT	OCCURRED							
12/05/2015	NO	INCIDENT	OCCURRED							
12/06/2015	NO	INCIDENT	OCCURRED							
12/07/2015	NO	INCIDENT	OCCURRED							
12/08/2015	NO	INCIDENT	OCCURRED							
12/09/2015	NO	INCIDENT	OCCURRED							
12/10/2015	NO	INCIDENT	OCCURRED							
12/11/2015	NO	INCIDENT	OCCURRED							
12/12/2015	NO	INCIDENT	OCCURRED							
12/13/2015	NO	INCIDENT	OCCURRED							
12/14/2015	NO	INCIDENT	OCCURRED							
12/15/2015	NO	INCIDENT	OCCURRED							
12/16/2015	NO	INCIDENT	OCCURRED							
12/17/2015	NO	INCIDENT	OCCURRED							

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
12/18/2015	NO	INCIDENT	OCCURRED							
12/19/2015	NO	INCIDENT	OCCURRED							
12/20/2015	NO	INCIDENT	OCCURRED							
12/21/2015	NO	INCIDENT	OCCURRED							
12/22/2015	NO	INCIDENT	OCCURRED							
12/23/2015	NO	INCIDENT	OCCURRED							
12/24/2015	NO	INCIDENT	OCCURRED							
12/25/2015	NO	INCIDENT	OCCURRED							
12/26/2015	NO	INCIDENT	OCCURRED							
12/27/2015	NO	INCIDENT	OCCURRED							
12/28/2015	NO	INCIDENT	OCCURRED							
12/29/2015	NO	INCIDENT	OCCURRED							
12/30/2015	NO	INCIDENT	OCCURRED							
12/31/2015	NO	INCIDENT	OCCURRED							

VEOLIA
WATER

Sent via Certified R.R.R. Mail 7014 1200 0002 2236 9913 on January 13, 2016

January 13, 2016

Connecticut Department of Energy and Environmental Protection
Mr. John Degirolamo
Bureau of Air Management
Engineering and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

Subject: Continuous Opacity Monitoring System Summary Report, Oct 1, 2015 to Dec 31, 2015.

Dear Mr. John Degirolamo:

Enclosed you will find a copy 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

John Batorski
Project Manager

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

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

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

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

Continuous Opacity Monitoring System Summary Report

Corporation Name	Borough of Naugatuck		
Premises Name	Borough of Naugatuck POTW		
Corporation Address	229 Church Street, Naugatuck, CT 06770		
Premises Address	500 Cherry Street, Naugatuck, CT 06770		
Premises Contact Person	John Batorski		
Contact Phone/FAX/e-mail	(203) 723-1433	(203) 723-8539	
Reporting Period Dates	From: October 1, 2015	To: December 31, 2015	
Were there any monitoring system failures during this reporting period? (Yes/ No - provide details in report).	YES	Attachments: COMS data (CD or diskette); COMS data (e-mailed); ☐ Copy of quarterly QA audits; ☐ Excepted activities records (if requested).	
Are any excess emissions being reported during this reporting period? (Yes/No - provide details in report).	NO		

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

Preparer : CK Environmental

Date: January 11, 2016

Plant Signature: John Batorski, 1-13-16

Print (or type) John Batorski

Name and Title: Plant Manager

Facility Name:	Borough of Naugatuck POTW		
Combustion Unit(s) Descriptions	Fluidized Bed Incinerator		
Unit Number or ID	EMU 52		
Unit Operating Hours	2053.48 hours		
Sampling Location	Fluidized Bed Incinerator Emissions Stack		
Manufacturer / Model No.	Land / 4500 Mark III	Serial No.	214324.52
Date of Certification	September 11, 2015	Date of last QA audit	November 20, 2015
Monitoring equipment malfunctions	2.68 hours		
Non-monitoring equipment malfunctions	.57 hours		
Calibrations			
Other known causes[1]			
Unknown causes	14.02 hours		
Total COM downtime	17.27 Hours		
Data Availability (calculated)	99.15%		

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

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

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

Facility Name:	Borough of Naugatuck POTW

Unit Number or ID	EMU 52	Unit Operating Hours (a)	2091.65

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

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

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

Opacity Monitoring Reports

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 09:48
PERIOD: 10/01/2015 - 12/31/2015

INCIDENT: INVALID OPACITY (%)

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
10/01/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/01/2015	06:56	07:11	16	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
10/01/2015	07:12	07:16	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/01/2015	07:25	13:32	368	13	PROCESS DOWN	N/A
10/02/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/02/2015	20:41	23:09	149	13	PROCESS DOWN	N/A
10/03/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/04/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/04/2015	06:56	06:59	4	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
10/04/2015	07:00	07:04	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/04/2015	13:04	13:11	8	13	PROCESS DOWN	N/A
10/05/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/05/2015	07:36	07:55	20	13	PROCESS DOWN	N/A
10/05/2015	07:58	09:00	63	13	PROCESS DOWN	N/A
10/06/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/06/2015	07:15	07:43	29	13	PROCESS DOWN	N/A
10/06/2015	07:59	08:12	14	13	PROCESS DOWN	N/A
10/06/2015	08:18	11:13	176	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/06/2015	11:14	11:34	21	13	PROCESS DOWN	N/A
10/06/2015	11:35	11:39	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/06/2015	11:40	17:58	379	13	PROCESS DOWN	N/A
10/07/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/08/2015	06:51	06:54	4	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/09/2015	06:51	06:54	4	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/10/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/11/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/11/2015	19:06	19:28	23	13	PROCESS DOWN	N/A
10/11/2015	19:50	19:51	2	13	PROCESS DOWN	N/A
10/11/2015	20:53	20:56	4	13	PROCESS DOWN	N/A
10/12/2015	05:27	06:50	84	13	PROCESS DOWN	N/A
10/12/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/12/2015	06:56	14:54	479	13	PROCESS DOWN	N/A
10/12/2015	14:56	15:09	14	13	PROCESS DOWN	N/A
10/13/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/13/2015	10:25	21:54	690	13	PROCESS DOWN	N/A
10/14/2015	00:32	00:39	8	13	PROCESS DOWN	N/A
10/14/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/15/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/16/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/17/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/18/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/18/2015	18:37	18:39	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/18/2015	21:11	21:15	5	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/19/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/19/2015	08:29	10:42	134	13	PROCESS DOWN	N/A
10/19/2015	10:43	10:44	2	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
10/19/2015	10:45	11:29	45	13	PROCESS DOWN	N/A
10/19/2015	11:30	11:34	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/19/2015	11:35	13:40	126	13	PROCESS DOWN	N/A
10/20/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/21/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
10/22/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/22/2015	09:15	11:27	133	13	PROCESS DOWN	N/A
10/22/2015	11:38	11:44	7	13	PROCESS DOWN	N/A
10/23/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/23/2015	22:33	22:35	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/24/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/24/2015	08:30	15:14	405	13	PROCESS DOWN	N/A
10/24/2015	19:23	19:26	4	13	PROCESS DOWN	N/A
10/24/2015	20:05	20:07	3	13	PROCESS DOWN	N/A
10/25/2015	05:48	06:50	63	13	PROCESS DOWN	N/A
10/25/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/25/2015	06:56	13:35	400	13	PROCESS DOWN	N/A
10/25/2015	19:59	20:37	39	13	PROCESS DOWN	N/A
10/25/2015	23:21	23:59	39	13	PROCESS DOWN	N/A
10/26/2015	00:00	00:18	19	13	PROCESS DOWN	N/A
10/26/2015	02:52	03:51	60	13	PROCESS DOWN	N/A
10/26/2015	04:59	05:22	24	13	PROCESS DOWN	N/A
10/26/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/27/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/28/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/28/2015	18:36	18:39	4	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	18:41	18:43	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	18:55	19:02	8	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	19:03	19:07	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/28/2015	19:08	19:08	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	19:18	19:29	12	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	20:59	21:01	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	21:07	21:11	5	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/28/2015	21:12	21:16	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/28/2015	21:40	21:41	2	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	00:32	00:34	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	00:52	00:54	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	01:02	01:07	6	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	01:09	01:09	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	01:18	01:51	34	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/29/2015	03:37	06:50	194	13	PROCESS DOWN	N/A
10/29/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/29/2015	06:56	23:59	1024	13	PROCESS DOWN	N/A
10/30/2015	00:00	06:32	393	13	PROCESS DOWN	N/A
10/30/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/31/2015	06:51	06:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/31/2015	10:29	10:29	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
10/31/2015	10:33	10:37	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/31/2015	10:39	10:43	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/01/2015	05:51	05:55	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/02/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/03/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/03/2015	07:57	08:06	10	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/04/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/05/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/05/2015	07:31	10:44	194	13	PROCESS DOWN	N/A
11/05/2015	11:00	12:44	105	13	PROCESS DOWN	N/A
11/05/2015	21:58	22:02	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/06/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/07/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/08/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/09/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/09/2015	07:47	15:41	475	13	PROCESS DOWN	N/A
11/09/2015	18:49	18:53	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/09/2015	19:08	19:08	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
11/09/2015	19:26	19:30	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/10/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/11/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/12/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/12/2015	20:57	21:26	30	13	PROCESS DOWN	N/A
11/13/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/14/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/14/2015	23:18	23:18	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/14/2015	23:21	23:22	2	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/14/2015	23:31	23:33	3	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/14/2015	23:56	23:59	4	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/15/2015	00:00	00:06	7	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/15/2015	00:10	00:19	10	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/15/2015	00:22	00:22	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/15/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/16/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/16/2015	07:27	20:06	760	13	PROCESS DOWN	N/A
11/17/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/18/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/19/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/20/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/20/2015	10:03	12:03	121	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/21/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/22/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/23/2015	04:23	05:54	92	13	PROCESS DOWN	N/A
11/23/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/23/2015	06:00	21:01	902	13	PROCESS DOWN	N/A
11/23/2015	22:02	22:16	15	13	PROCESS DOWN	N/A
11/24/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/24/2015	10:25	10:37	13	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
11/24/2015	10:38	11:03	26	13	PROCESS DOWN	N/A
11/24/2015	11:04	11:22	19	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
11/24/2015	11:23	12:15	53	13	PROCESS DOWN	N/A
11/25/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/25/2015	07:50	07:50	1	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/25/2015	07:51	08:01	11	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/25/2015	08:02	08:07	6	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/25/2015	08:10	08:14	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/26/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/26/2015	09:33	09:40	8	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
11/26/2015	09:41	09:45	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/27/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/28/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/29/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/30/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/30/2015	08:47	09:01	15	13	PROCESS DOWN	N/A
12/01/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/01/2015	07:47	09:01	75	13	PROCESS DOWN	N/A
12/02/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/03/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/04/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/05/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/06/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/07/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/08/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/09/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/09/2015	12:48	12:50	3	13	PROCESS DOWN	N/A
12/09/2015	13:00	13:13	14	13	PROCESS DOWN	N/A
12/10/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/11/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE

DATE	START TIME	END TIME	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
12/12/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/13/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/14/2015	05:14	05:54	41	13	PROCESS DOWN	N/A
12/14/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/14/2015	06:00	14:13	494	13	PROCESS DOWN	N/A
12/15/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/16/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/17/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/18/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/19/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/20/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/21/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/21/2015	06:00	13:58	479	13	PROCESS DOWN	N/A
12/22/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/22/2015	10:33	10:33	1	13	PROCESS DOWN	N/A
12/23/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/24/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/25/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/26/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/26/2015	12:47	13:01	15	13	PROCESS DOWN	N/A
12/26/2015	13:17	13:31	15	13	PROCESS DOWN	N/A
12/27/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/28/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/29/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/30/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/31/2015	05:55	05:59	5	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE

INCIDENT SUMMARY: INVALID OPACITY (%)

CODE	HOURS	PERCENT	EXPLANATION
11	0.33	0.19	EXCESS DRIFT PRIMARY MONITOR
13	154.52	89.95	PROCESS DOWN
16	2.35	1.37	PRIMARY MONITOR MALFUNCTION
18	0.57	0.33	DATA HANDLING SYSTEM MALFUNCTION
20	14.02	8.16	CORRECTIVE MAINTENANCE

} 17.27

TOTAL HOURS: 171.78

92 days in Q4 2015 = 2208 hours
− 154.52 (down)
2053.48

$$\frac{2053.48 - 17.27}{2053.48} \times 100 = 99.15\%$$

CO @7% AVAILABILITY AND VALIDITY

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 09:57
PERIOD: 10/01/2015 - 12/31/2015

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
10/01/2015	17.87	1.6	0.00
10/02/2015	21.52	23.3	0.00
10/03/2015	24.00	14.2	0.00
10/04/2015	23.87	12.2	0.00
10/05/2015	22.62	7.1	0.00
10/06/2015	14.42	19.1	0.00
10/07/2015	24.00	11.2	0.00
10/08/2015	24.00	26.1	0.00
10/09/2015	24.00	28.2	0.00
10/10/2015	24.00	37.7	0.00
10/11/2015	23.52	9.0	0.00
10/12/2015	14.30	19.4	0.00
10/13/2015	12.50	15.9	0.00
10/14/2015	23.87	33.7	0.00
10/15/2015	24.00	18.1	0.00
10/16/2015	24.00	10.2	0.00
10/17/2015	24.00	16.8	0.00
10/18/2015	24.00	18.1	0.00
10/19/2015	18.80	9.9	0.03
10/20/2015	24.00	14.6	0.00
10/21/2015	24.00	22.6	0.00
10/22/2015	21.67	11.8	0.00
10/23/2015	24.00	18.7	0.00
10/24/2015	17.13	38.0	0.00
10/25/2015	14.90	0.0	0.00
10/26/2015	22.28	0.0	0.00
10/27/2015	24.00	0.0	0.00
10/28/2015	24.00	0.0	0.00
10/29/2015	3.62	17.1	0.00
10/30/2015	17.45	29.0	0.00
10/31/2015	24.00	21.8	0.00
11/01/2015	24.00	5.1	0.00
11/02/2015	24.00	12.1	0.00
11/03/2015	24.00	9.8	0.00
11/04/2015	24.00	5.1	0.00
11/05/2015	19.02	8.5	0.00
11/06/2015	24.00	26.4	0.00
11/07/2015	24.00	5.2	0.00
11/08/2015	24.00	3.1	0.00
11/09/2015	16.08	16.0	0.00

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
11/10/2015	24.00	15.6	0.00
11/11/2015	24.00	3.0	0.00
11/12/2015	23.50	3.8	0.00
11/13/2015	24.00	6.4	0.00
11/14/2015	24.00	1.5	0.00
11/15/2015	24.00	2.6	0.00
11/16/2015	11.33	9.5	0.00
11/17/2015	24.00	33.0	0.00
11/18/2015	24.00	45.4	0.00
11/19/2015	24.00	22.2	0.00
11/20/2015	24.00	18.1	0.00
11/21/2015	24.00	1.9	0.00
11/22/2015	24.00	2.6	0.00
11/23/2015	7.10	31.4	0.00
11/24/2015	22.25	26.2	0.52
11/25/2015	24.00	19.8	0.00
11/26/2015	24.00	9.1	0.00
11/27/2015	24.00	1.4	0.00
11/28/2015	24.00	7.4	0.00
11/29/2015	24.00	6.0	0.00
11/30/2015	23.75	19.6	0.00
12/01/2015	22.75	6.6	0.00
12/02/2015	24.00	23.4	0.00
12/03/2015	24.00	12.5	0.00
12/04/2015	24.00	33.3	0.00
12/05/2015	24.00	28.4	0.00
12/06/2015	24.00	16.5	0.00
12/07/2015	24.00	32.1	0.00
12/08/2015	24.00	17.5	0.00
12/09/2015	23.72	18.5	0.00
12/10/2015	24.00	17.0	0.00
12/11/2015	24.00	16.1	0.00
12/12/2015	24.00	9.2	0.00
12/13/2015	24.00	6.4	0.00
12/14/2015	15.00	23.1	0.00
12/15/2015	24.00	18.5	0.00
12/16/2015	24.00	22.5	0.00
12/17/2015	24.00	21.4	0.00
12/18/2015	24.00	33.4	0.00
12/19/2015	24.00	41.1	0.00
12/20/2015	24.00	37.9	0.00
12/21/2015	16.00	24.0	0.00
12/22/2015	23.98	24.8	0.00
12/23/2015	24.00	24.3	0.00
12/24/2015	24.00	20.9	0.00
12/25/2015	24.00	1.2	0.00
12/26/2015	23.50	56.8	0.00
12/27/2015	24.00	16.4	0.00
12/28/2015	24.00	21.9	0.00

DATE	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
12/29/2015	24.00	15.0	0.00
12/30/2015	24.00	22.4	0.00
12/31/2015	24.00	16.5	0.00

	SOURCE ON (HRS)	CO @7% (ppmvd)	DAS DOWN (HRS)
AVERAGE		17.0	
TOTAL	2050.30		0.55
AVAILABILITY		98.90	

OPACITY AVAILABILITY AND VALIDITY

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 10:06
PERIOD: 10/01/2015 - 12/31/2015

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
10/01/2015	17.87	0.08	0.00
10/02/2015	21.52	0.15	0.00
10/03/2015	24.00	0.11	0.00
10/04/2015	23.87	0.36	0.00
10/05/2015	22.62	0.82	0.00
10/06/2015	14.42	2.83	0.00
10/07/2015	24.00	3.18	0.00
10/08/2015	24.00	1.62	0.00
10/09/2015	24.00	2.09	0.00
10/10/2015	24.00	2.84	0.00
10/11/2015	23.52	3.23	0.00
10/12/2015	14.30	3.27	0.00
10/13/2015	12.50	3.37	0.00
10/14/2015	23.87	3.39	0.00
10/15/2015	24.00	3.65	0.00
10/16/2015	24.00	2.85	0.00
10/17/2015	24.00	4.24	0.00
10/18/2015	24.00	6.77	0.00
10/19/2015	18.80	5.71	0.03
10/20/2015	24.00	0.76	0.00
10/21/2015	24.00	1.39	0.00
10/22/2015	21.67	0.15	0.00
10/23/2015	24.00	2.53	0.00
10/24/2015	17.13	7.36	0.00
10/25/2015	14.90	5.07	0.00
10/26/2015	22.28	3.98	0.00
10/27/2015	24.00	4.17	0.00
10/28/2015	24.00	2.39	0.00
10/29/2015	3.62	2.17	0.00
10/30/2015	17.45	3.01	0.00
10/31/2015	24.00	4.14	0.00
11/01/2015	24.00	2.39	0.00
11/02/2015	24.00	2.12	0.00
11/03/2015	24.00	4.27	0.00
11/04/2015	24.00	5.22	0.00
11/05/2015	19.02	4.44	0.00
11/06/2015	24.00	1.43	0.00
11/07/2015	24.00	4.16	0.00
11/08/2015	24.00	5.54	0.00
11/09/2015	16.08	7.58	0.00

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
11/10/2015	24.00	4.38	0.00
11/11/2015	24.00	2.61	0.00
11/12/2015	23.50	3.11	0.00
11/13/2015	24.00	4.24	0.00
11/14/2015	24.00	6.49	0.00
11/15/2015	24.00	6.71	0.00
11/16/2015	11.33	7.24	0.00
11/17/2015	24.00	6.85	0.00
11/18/2015	24.00	5.27	0.00
11/19/2015	24.00	2.24	0.00
11/20/2015	24.00	4.26	0.00
11/21/2015	24.00	5.89	0.00
11/22/2015	24.00	4.25	0.00
11/23/2015	7.10	4.69	0.00
11/24/2015	22.25	7.23	0.52
11/25/2015	24.00	7.60	0.00
11/26/2015	24.00	7.08	0.00
11/27/2015	24.00	2.36	0.00
11/28/2015	24.00	4.60	0.00
11/29/2015	24.00	5.80	0.00
11/30/2015	23.75	6.28	0.00
12/01/2015	22.75	5.35	0.00
12/02/2015	24.00	5.09	0.00
12/03/2015	24.00	4.81	0.00
12/04/2015	24.00	6.85	0.00
12/05/2015	24.00	6.24	0.00
12/06/2015	24.00	6.10	0.00
12/07/2015	24.00	6.26	0.00
12/08/2015	24.00	4.74	0.00
12/09/2015	23.72	5.19	0.00
12/10/2015	24.00	4.57	0.00
12/11/2015	24.00	4.70	0.00
12/12/2015	24.00	5.22	0.00
12/13/2015	24.00	3.90	0.00
12/14/2015	15.00	2.64	0.00
12/15/2015	24.00	2.50	0.00
12/16/2015	24.00	4.49	0.00
12/17/2015	24.00	3.39	0.00
12/18/2015	24.00	3.96	0.00
12/19/2015	24.00	6.24	0.00
12/20/2015	24.00	7.11	0.00
12/21/2015	16.00	3.00	0.00
12/22/2015	23.98	2.76	0.00
12/23/2015	24.00	5.26	0.00
12/24/2015	24.00	1.30	0.00
12/25/2015	24.00	3.49	0.00
12/26/2015	23.50	2.35	0.00
12/27/2015	24.00	2.24	0.00
12/28/2015	24.00	2.26	0.00

DATE	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
12/29/2015	24.00	3.88	0.00
12/30/2015	24.00	5.81	0.00
12/31/2015	24.00	5.76	0.00

	SOURCE ON (HRS)	OPACITY (%)	DAS DOWN (HRS)
TOTAL	2050.30		0.55
AVAILABILITY		98.97	

Continuous Opacty Monitoring Reports

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/07/2016 @ 09:46
PERIOD: 10/01/2015 - 12/31/2015

INCIDENT: HI 1-HR OPACITY (%)

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
10/01/2015	NO	INCIDENT	OCCURRED							
10/02/2015	NO	INCIDENT	OCCURRED							
10/03/2015	NO	INCIDENT	OCCURRED							
10/04/2015	NO	INCIDENT	OCCURRED							
10/05/2015	NO	INCIDENT	OCCURRED							
10/06/2015	NO	INCIDENT	OCCURRED							
10/07/2015	NO	INCIDENT	OCCURRED							
10/08/2015	NO	INCIDENT	OCCURRED							
10/09/2015	NO	INCIDENT	OCCURRED							
10/10/2015	NO	INCIDENT	OCCURRED							
10/11/2015	NO	INCIDENT	OCCURRED							
10/12/2015	NO	INCIDENT	OCCURRED							
10/13/2015	NO	INCIDENT	OCCURRED							
10/14/2015	NO	INCIDENT	OCCURRED							
10/15/2015	NO	INCIDENT	OCCURRED							
10/16/2015	NO	INCIDENT	OCCURRED							
10/17/2015	NO	INCIDENT	OCCURRED							
10/18/2015	NO	INCIDENT	OCCURRED							
10/19/2015	NO	INCIDENT	OCCURRED							
10/20/2015	NO	INCIDENT	OCCURRED							
10/21/2015	NO	INCIDENT	OCCURRED							
10/22/2015	NO	INCIDENT	OCCURRED							
10/23/2015	NO	INCIDENT	OCCURRED							
10/24/2015	NO	INCIDENT	OCCURRED							
10/25/2015	NO	INCIDENT	OCCURRED							
10/26/2015	NO	INCIDENT	OCCURRED							
10/27/2015	NO	INCIDENT	OCCURRED							
10/28/2015	NO	INCIDENT	OCCURRED							
10/29/2015	NO	INCIDENT	OCCURRED							
10/30/2015	NO	INCIDENT	OCCURRED							
10/31/2015	NO	INCIDENT	OCCURRED							
11/01/2015	NO	INCIDENT	OCCURRED							
11/02/2015	NO	INCIDENT	OCCURRED							
11/03/2015	NO	INCIDENT	OCCURRED							
11/04/2015	NO	INCIDENT	OCCURRED							
11/05/2015	NO	INCIDENT	OCCURRED							
11/06/2015	NO	INCIDENT	OCCURRED							
11/07/2015	NO	INCIDENT	OCCURRED							
11/08/2015	NO	INCIDENT	OCCURRED							
11/09/2015	NO	INCIDENT	OCCURRED							
11/10/2015	NO	INCIDENT	OCCURRED							
11/11/2015	NO	INCIDENT	OCCURRED							
11/12/2015	NO	INCIDENT	OCCURRED							
11/13/2015	NO	INCIDENT	OCCURRED							
11/14/2015	NO	INCIDENT	OCCURRED							
11/15/2015	NO	INCIDENT	OCCURRED							
11/16/2015	NO	INCIDENT	OCCURRED							
11/17/2015	NO	INCIDENT	OCCURRED							
11/18/2015	NO	INCIDENT	OCCURRED							
11/19/2015	NO	INCIDENT	OCCURRED							

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
11/20/2015	NO	INCIDENT	OCCURRED							
11/21/2015	NO	INCIDENT	OCCURRED							
11/22/2015	NO	INCIDENT	OCCURRED							
11/23/2015	NO	INCIDENT	OCCURRED							
11/24/2015	NO	INCIDENT	OCCURRED							
11/25/2015	NO	INCIDENT	OCCURRED							
11/26/2015	NO	INCIDENT	OCCURRED							
11/27/2015	NO	INCIDENT	OCCURRED							
11/28/2015	NO	INCIDENT	OCCURRED							
11/29/2015	NO	INCIDENT	OCCURRED							
11/30/2015	NO	INCIDENT	OCCURRED							
12/01/2015	NO	INCIDENT	OCCURRED							
12/02/2015	NO	INCIDENT	OCCURRED							
12/03/2015	NO	INCIDENT	OCCURRED							
12/04/2015	NO	INCIDENT	OCCURRED							
12/05/2015	NO	INCIDENT	OCCURRED							
12/06/2015	NO	INCIDENT	OCCURRED							
12/07/2015	NO	INCIDENT	OCCURRED							
12/08/2015	NO	INCIDENT	OCCURRED							
12/09/2015	NO	INCIDENT	OCCURRED							
12/10/2015	NO	INCIDENT	OCCURRED							
12/11/2015	NO	INCIDENT	OCCURRED							
12/12/2015	NO	INCIDENT	OCCURRED							
12/13/2015	NO	INCIDENT	OCCURRED							
12/14/2015	NO	INCIDENT	OCCURRED							
12/15/2015	NO	INCIDENT	OCCURRED							
12/16/2015	NO	INCIDENT	OCCURRED							
12/17/2015	NO	INCIDENT	OCCURRED							
12/18/2015	NO	INCIDENT	OCCURRED							
12/19/2015	NO	INCIDENT	OCCURRED							
12/20/2015	NO	INCIDENT	OCCURRED							
12/21/2015	NO	INCIDENT	OCCURRED							
12/22/2015	NO	INCIDENT	OCCURRED							
12/23/2015	NO	INCIDENT	OCCURRED							
12/24/2015	NO	INCIDENT	OCCURRED							
12/25/2015	NO	INCIDENT	OCCURRED							
12/26/2015	NO	INCIDENT	OCCURRED							
12/27/2015	NO	INCIDENT	OCCURRED							
12/28/2015	NO	INCIDENT	OCCURRED							
12/29/2015	NO	INCIDENT	OCCURRED							
12/30/2015	NO	INCIDENT	OCCURRED							
12/31/2015	NO	INCIDENT	OCCURRED							

Part 5: Monitoring and Non-Monitoring Equipment Malfunctions

EMU# or Unit ID	Permit Cond. ID	Monitoring System Failure Period				Description and Cause of Monitoring System Failure	Corrective Actions Taken to Remedy Monitoring System Failure	Measures Taken to Prevent Future Monitoring System Failures
		Start		End				
		Date	Time	Date	Time			
52	III.E.21	10/01	06:56	10/01	07:11	Excess Drift Primary Monitor	Manually Recalibrate	Continued Training
52	III.E.21	10/04	06:56	10/04	06:59	Excess Drift Primary Monitor	Manually Recalibrated	Continued Training
52	III.E.21	10/18	18:37	10/18	18:39	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/18	21:21	10/18	21:15	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/19	10:43	10/19	10:44	Data Handling System Malfunction	Routine Maintenance	PLC has seven day backup capability so no data is lost
52	III.E.21	10/23	22:33	10/23	22:35	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	18:36	10/28	18:39	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	18:41	10/28	18:43	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	18:55	10/28	19:02	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	19:08	10/28	19:08	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	19:18	10/28	19:29	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	20:59	10/28	21:01	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	21:07	10/28	21:11	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/28	21:40	10/28	21:41	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/29	00:32	10/29	00:34	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/29	00:52	10/29	00:54	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	12/29	01:02	10/29	01:07	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/29	01:09	10/29	01:09	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/29	01:18	10/29	01:51	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	10/31	10:29	10/31	10:29	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/09	19:08	11/09	19:08	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/14	23:18	11/14	23:18	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/14	23:21	11/14	23:22	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/14	23:31	11/14	23:33	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/14	23:56	11/14	23:59	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/15	00:00	11/15	00:06	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/15	00:10	11/15	00:19	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/15	00:22	11/15	00:22	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/24	10:25	11/24	10:37	Data Handling System Malfunction	Routine Maintenance	PLC has seven day backup capability so no data is lost

Part 5: Monitoring and Non-Monitoring Equipment Malfunctions (continued)

EMU# or Unit ID	Permit Cond. ID	Monitoring System Failure Period				Description and Cause of Monitoring System Failure	Corrective Actions Taken to Remedy Monitoring System Failure	Measures Taken to Prevent Future Monitoring System Failures
		Start		End				
		Date	Time	Date	Time			
52	III.E.21	11/24	11:04	11/24	11:22	Data Handling System Malfunction	Routine Maintenance	PLC has seven day backup capability so no data is lost
52	III.E.21	11/25	07:50	11/25	07:50	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/25	08:02	11/25	08:07	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21	11/26	09:33	11/26	09:40	Primary Monitor Malfunction	Corrective Maintenance	Manual Recalibration
52	III.E.21							
52	III.E.21							
52	III.E.21							

Part 6: List of Excess Emissions

EMU# or Unit ID	Permit Cond. ID	Deviation Period				Description, Cause or Likely Cause of Deviation	Measured Value of Deviation	Description and Date(s) of Actions Taken to Correct Deviation	Description and Date(s) of Measures Taken to Prevent Future Deviations
		Start		End					
		Date	Time	Date	Time				
52	III.E.21					None to Report			

VEOLIA
WATER

Sent Certified R.R.R. mail #7014 1200 0002 2237 0117 on January 12, 2016

Ms. Thelma Murphy
USEPA Region 1
OES Water Technical Unit
Mail Code SEW
JFK Building
Boston MA 02201-0001

January 12, 2016

Re: 503 Regulation Annual Report for 2015

Dear Ms. Murphy:

Enclosed please find a copy of the 2015 annual report for the Borough of Naugatuck, CT. Enclosed is the following:

- Table 3-3, Summary of Metals Results
- Table 3-2, Summary of THC Results
- Field Data Input Sheet
- Flow and Moistures Calculations
- Naugatuck Metals 503 Report
- Summary of Multiple Metals Emissions Testing
- Incinerator Annual Averages
- Incinerator Annual Operating Data

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck
Enclosure: 503 Regulation Annual Report

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

Environmental

Table 3-3
Summary of Metals Results
WESP on

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	11:40	14:15	Average	
	Stop	10:53	13:45	16:20		
Sample Conditions						
Volume	(dscf)	87.44	86.01	88.67		
	(dscm)	2.476	2.436	2.511		
Isokinetics	(%)	94.5	95.3	98.6		
Sludge Feedrate	(dry Ton/hr)	2.68	2.68	2.68	2.68	
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.57	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Trace Metals						
Arsenic (As) Catch	(mg)	0.001	0.002	0.001	0.001	
As Concentration	(ug/dscm)	0.323	0.591	0.319	0.411	95.4
As Emission Rate	(lb/hr)	0.00002	0.00003	0.00002	0.00002	
Beryllium (Be) Catch	(mg)	0.000	0.000	0.000	0.000	
Be Concentration	(ug/dscm)	0.0808	0.0821	0.0796	0.0808	19.1
Be Emission Rate	(lb/hr)	4.31E-06	4.27E-06	4.13E-06	4.24E-06	
Be Emission Rate	(lbs/day)	0.00010	0.00010	0.00010	0.00010	0.022
Cadmium (Cd) Catch	(mg)	0.000	0.002	0.000	0.001	
Cd Concentration	(ug/dscm)	0.08	0.74	0.08	0.30	763.5
Cd Emission Rate	(lb/hr)	0.00000	0.00004	0.00000	0.00002	
Chromium (Cr) Catch	(mg)	0.008	0.011	0.006	0.0083	
Cr Concentration	(ug/dscm)	1.86	3.37	1.15	2.13	4771.8
Cr Emission Rate	(lb/hr)	0.00010	0.00018	0.00006	0.00011	
Copper (Cu) Catch	(mg)	0.020	0.018	0.010	0.0161	
Cu Concentration	(ug/dscm)	0.42	3.97	0.10	1.50	38,174.8
Cu Emission Rate	(lb/hr)	0.00035	0.00031	0.00014	0.00027	
Lead (Pb) Catch	(mg)	0.004	0.031	0.004	0.013	
Pb Concentration	(ug/dscm)	1.54	12.29	1.53	5.12	5,726.2
Pb Emission Rate	(lb/hr)	0.00008	0.00064	0.00008	0.0003	
Manganese (Mn) Catch	(mg)	0.010	0.086	0.015	0.037	
Mn Concentration	(ug/dscm)	2.53	33.65	4.72	13.63	38,174.8
Mn Emission Rate	(lb/hr)	0.00013	0.00175	0.00024	0.00071	
Mercury (Hg) Catch	(mg)	0.026	0.193	0.221	0.147	
Hg Concentration	(ug/dscm)	10.59	79.15	87.76	59.16	1,908.7
Hg Emission Rate	(lb/hr)	0.00056	0.0041	0.00455	0.0031	
Hg Emission Rate	(lbs/day)	0.0136	0.0988	0.1092	0.0738	7.055
Nickel (Ni) Catch	(mg)	0.014	0.016	0.014	0.015	
Ni Concentration	(ug/dscm)	4.74	5.76	4.51	5.00	9,543.7
Ni Emission Rate	(lb/hr)	0.00025	0.00030	0.00023	0.00026	
Selenium (Se) Catch	(mg)	0.026	0.024	0.022	0.024	
Se Concentration	(ug/dscm)	9.89	9.48	8.44	9.27	7,635.0
Se Emission Rate	(lb/hr)	0.00053	0.00049	0.00044	0.00049	
Zinc (Zn) Catch	(mg)	0.132	0.291	0.086	0.170	
Zn Concentration	(ug/dscm)	51.29	117.41	32.26	66.99	190,873.9
Zn Emission Rate	(lb/hr)	0.0027	0.0061	0.0017	0.0035	

Environmental

3.3 Problems and Changes

There were no problems or changes that occurred during this test program.

3.4 Presentation of Results

The results of the Emissions Compliance Testing Program indicate that the emissions from FBI are within the allowable limits set forth for this facility by the CTDEEP. **Tables 3-2 through 3-5** provide individual test run results and data.

Table 3-2
Summary of THC Results
WESP on

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	10:12	11:40	Average	
	Stop	9:50	11:12	12:40		
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.6	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Gaseous Emissions						
Volatile Organic Compounds	(ppm)	0.85	1.04	0.90	0.93	
	(lb/hr)	0.08	0.10	0.09	0.09	
	(lb/DT)	0.03	0.04	0.03	0.03	0.32
	(tons/yr)	0.36	0.43	0.37	0.39	

FIELD DATA INPUT SHEET

PLANT: Veolia Naugatuck
SOURCE: FB Sludge Incinerator Out - WESP on
TEST NO: Incinerator Out Metals-1
DATE: 09/22/15

Start Time:	8:50	EDST
End Time:	10:53	EDST
Total Test Time:	120	Mins.

K Factor = 6.5

Cp:	0.84
Pb:	30.33
Pg (static):	1.00
Stack Dia (in.):	42
L (in.):	
W (in.):	
As (ft^2):	9.62
Ps (in. Hg):	30.40
%CO2:	11.24
%O2:	7.75
%CO:	0.00

Impingers (Initial.)

1:	1155.1
2:	735.8
3:	540.0
4:	754.4
5:	646.4
6:	907.2

Impingers (Final)

1:	1303.3
2:	764.0
3:	546.8
4:	759.4
5:	648.7
6:	924.0

Moisture Catch (mg)	207.3

Dry Gas Meter

Start:	705.015
End:	790.264
Y Factor:	1.0180
Leak Check Volume:	0
Final Volume:	85.249

Nozzle Diam. :	0.309
Filter Number :	N/A
No. of Points :	16

Pt.	Delta P	Sqrt.	Delta H	Mtr. In	Mtr. Out	Stk. Tmp.
1	0.28	0.529	1.96	72	69	202
2	0.29	0.539	2.03	73	69	203
3	0.31	0.557	2.02	74	70	205
4	0.31	0.557	2.02	75	71	205
5	0.31	0.557	2.02	75	71	203
6	0.32	0.566	2.08	75	71	201
7	0.32	0.566	2.08	74	71	201
8	0.28	0.529	1.82	75	71	197
1	0.27	0.520	1.76	74	71	200
2	0.29	0.539	1.89	76	72	200
3	0.30	0.548	1.95	77	72	200
4	0.32	0.566	2.08	78	73	201
5	0.33	0.574	2.15	77	73	201
6	0.28	0.529	1.82	77	74	202
7	0.27	0.520	1.76	77	74	201
8	0.25	0.500	1.63	77	74	201
	0.296	0.543	1.939	74		201

FLOWS AND MOISTURES

PLANT:	Veolia Naugatuck	TEST NO.:	Incinerator Out Metals-1
SOURCE:	FB Sludge Incinerator Out - WESP on	DATE:	09/22/15

Meter Volume @ Standard Conditions, Vm(std)	87.440	dscf
	2.476	dscm

Vm(std) = K1 * Vm * Y Factor * Pm / Tm

where: K1 = 17.64 deg R / in. Hg

Vm = volume of meter, meter conditions, dcf	85.249
Pm = meter pressure [(Delta H/13.6) + Pb], in. Hg	30.47
Tm = meter temperature (deg. F + 460), deg. R	534

Percent Moisture, %H2O	10.1	%

%H2O = {(K2 * Vc) / [Vm(std) + (K2 * Vc)]} * 100

where: K2 = 0.04707 cu. ft./ml

Vc = volume of condenser catch, ml	207.3

Moisture Fraction, Bwo	0.101	

Bwo = %H2O / 100

Dry Molecular Weight of Stack Gas, Md		30.11	lb/lb mol
	%CO2	11.2	
Md = [(0.44*%CO2)+(0.32*%O2)+(0.28*(%CO+%N N2)]	%O2	7.8	
	%CO+%N2	81.0	
Wet Molecular Weight of Stack Gas, Ms		28.89	lb/lb mol

Ms = Md * (1-Bwo) + (18 * Bwo)

Stack Gas Velocity, Vs	33.860	fps

Vs = K3 * Cp * (avg sqrt delta P) * sqrt(Ts/(Ps * Ms))

where: K3 = 85.49 fps * sqrt[(lb/lb mol)(in. Hg)/(deg. R)(in H2O)]

Cp = pitot coefficient, 0.84 for s-type; 0.99 for std.	0.84
Ts = stack temperature (deg. F + 460), deg. R	661.4
Ps = stack pressure [(Ps/13.6) + Pb], in. Hg	30.40

Volumetric Flow Rate, stack conditions, Qa	19,544	ACFM

Qa = Vs * As * 60

where: As = cross sectional area of stack @ sampling location

Volumetric Flow Rate, standard conditions, Qs	15,852	SCFM

Qs = Qa * K1 * Ps / Ts

Volumetric Flow Rate, dry standard conditions, Qsd	14,251	DSCFM

Qds = Qs * (1-Bwo)

Naugatuck POTW, Naugatuck, CT

Sludge Metals 503 Report

YEAR: 2015

	Lead	Arsenic	Cadmium	Chromium	Nickel
January	57.0	2.30	1.36	22.40	18.1
February	41.3	2.60	1.62	27.90	26.8
March	35.3	2.30	1.39	26.60	21.0
April	42.1	3.15	1.57	31.90	21.7
May	46.0	2.70	1.64	21.90	15.0
June	53.5	4.00	1.80	41.50	26.7
July	61.3	3.10	2.12	56.05	25.1
August	61.3	3.70	1.90	81.70	34.9
September	65.2	<0.97	1.54	37.23	23.0
October	59.5	1.30	1.66	46.60	28.3
November	56.8	<0.95	1.63	44.05	24.8
December	38.6	2.80	1.21	30.60	13.2

Note: All values in mg/kg

Summary of Multiple-Metals Emissions Testing
Veolia Water North America LLC
FB Sludge Incinerator - WESP on
Naugatuck, Connecticut
September 22, 2015

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals-2	Incinerator Out Metals-3		Facility Permit Limit
Date		09/22/15	09/22/15	09/22/15		
Time	Start	8:50	11:40	14:15	Average	
	Stop	10:53	13:45	16:20		
Sample Conditions						
Volume	(dscf)	87.44	86.01	88.67		
	(dscm)	2.476	2.436	2.511		
Isokinetics	(%)	94.5	95.3	98.6		
Sludge Feedrate	(dry Ton/hr)	2.68	2.68	2.68	2.68	
Stack Conditions						
Flow Rate	(dscfm)	14,251	13,891	13,851	13,998	
Temperature	(°F)	201.4	200.0	200.1	200.5	
Moisture	(%)	10.1	11.4	12.1	11.2	
Oxygen	(%)	7.75	7.56	7.41	7.57	
Carbon Dioxide	(%)	11.24	10.77	11.15	11.1	
Trace Metals						
Arsenic (As) Catch	(mg)	0.001	0.002	0.001	0.001	
As Concentration	(ug/dscm)	0.323	0.591	0.319	0.411	95.4
As Emission Rate	(lb/hr)	0.00002	0.00003	0.00002	0.00002	
Beryllium (Be) Catch	(mg)	0.000	0.000	0.000	0.000	
Be Concentration	(ug/dscm)	0.0808	0.0821	0.0796	0.0808	19.1
Be Emission Rate	(lb/hr)	4.31E-06	4.27E-06	4.13E-06	4.24E-06	
Be Emission Rate	(lbs/day)	0.00010	0.00010	0.00010	0.00010	0.022
Cadmium (Cd) Catch	(mg)	0.000	0.002	0.000	0.001	
Cd Concentration	(ug/dscm)	0.08	0.74	0.08	0.30	763.5
Cd Emission Rate	(lb/hr)	0.00000	0.00004	0.00000	0.00002	
Chromium (Cr) Catch	(mg)	0.008	0.011	0.006	0.0083	
Cr Concentration	(ug/dscm)	1.86	3.37	1.15	2.13	4771.8
Cr Emission Rate	(lb/hr)	0.00010	0.00018	0.00006	0.00011	
Copper (Cu) Catch	(mg)	0.020	0.018	0.010	0.0161	
Cu Concentration	(ug/dscm)	0.42	3.97	0.10	1.50	38,174.8
Cu Emission Rate	(lb/hr)	0.00035	0.00031	0.00014	0.00027	
Lead (Pb) Catch	(mg)	0.004	0.031	0.004	0.013	
Pb Concentration	(ug/dscm)	1.54	12.29	1.53	5.12	5,726.2
Pb Emission Rate	(lb/hr)	0.00008	0.00064	0.00008	0.0003	
Manganese (Mn) Catch	(mg)	0.010	0.086	0.015	0.037	
Mn Concentration	(ug/dscm)	2.53	33.65	4.72	13.63	38,174.8
Mn Emission Rate	(lb/hr)	0.00013	0.00175	0.00024	0.00071	
Mercury (Hg) Catch	(mg)	0.026	0.193	0.221	0.147	
Hg Concentration	(ug/dscm)	10.59	79.15	87.76	59.16	1,908.7
Hg Emission Rate	(lb/hr)	0.00056	0.0041	0.00455	0.0031	
Hg Emission Rate	(lbs/day)	0.0136	0.0988	0.1092	0.0738	7.055
Nickel (Ni) Catch	(mg)	0.014	0.016	0.014	0.015	
Ni Concentration	(ug/dscm)	4.74	5.76	4.51	5.00	9,543.7
Ni Emission Rate	(lb/hr)	0.00025	0.00030	0.00023	0.00026	
Selenium (Se) Catch	(mg)	0.026	0.024	0.022	0.024	
Se Concentration	(ug/dscm)	9.89	9.48	8.44	9.27	7,635.0
Se Emission Rate	(lb/hr)	0.00053	0.00049	0.00044	0.00049	
Zinc (Zn) Catch	(mg)	0.132	0.291	0.086	0.170	
Zn Concentration	(ug/dscm)	51.29	117.41	32.26	66.99	190,873.9
Zn Emission Rate	(lb/hr)	0.0027	0.0061	0.0017	0.0035	

INCINERATOR MONTHLY EMISSION REPORT1

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT

DATE CREATED: 01/12/2016 @ 08:24
PERIOD: 01/2015 - 12/2015

DATE	SOURCE ON (HRS)	TOTAL SLUDGE PV (%)	OVERALL DP ("wc)	BED TEMP (F)	FREE BOARD TEMP (F)	FB O2 (%)	CO @7% (ppmvd)	OPACITY (%)	WESP KV #1 (kV)	WESP KV #2 (kV)	OIL FLOW (GPH)	OIL FLOW (GAL)	DAS DOWN (HRS)
01/2015	725.43	75.5	52.8	1406.2	1629.2	8.9	36.2	0.38	49.74	0.00	9.8	6671.9	0.00
02/2015	651.28	71.8	39.0	1399.5	1618.5	10.1	46.2	0.35	47.46	0.00	26.5	16863.2	0.00
03/2015	543.87	73.5	63.2	1406.7	1615.5	8.7	17.1	0.53	48.25	0.00	20.8	9646.5	1.85
04/2015	703.35	72.1	40.7	1422.3	1670.3	7.3	26.2	0.74	49.53	0.00	15.2	10580.4	0.00
05/2015	738.25	72.4	44.0	1487.4	1699.2	6.5	16.3	0.64	55.14	0.00	0.1	56.0	0.00
06/2015	681.80	80.8	42.6	1482.6	1675.3	7.0	16.1	0.45	53.63	0.00	0.3	96.0	3.12
07/2015	716.88	75.6	40.9	1469.1	1653.0	8.4	7.0	1.43	54.10	0.00	0.0	0.0	0.00
08/2015	689.45	76.3	41.6	1467.2	1662.3	8.2	7.1	0.00	53.80	0.00	0.0	0.0	1.93
09/2015	676.75	74.5	42.2	1456.0	1655.6	7.5	8.1	0.60	53.49	0.00	0.0	0.0	1.88
10/2015	650.32	69.6	37.1	1431.4	1624.0	9.0	16.3	2.83	50.26	0.00	0.0	0.0	0.03
11/2015	675.03	68.3	40.4	1444.8	1664.3	7.8	12.6	4.88	51.66	0.00	0.0	0.0	0.52
12/2015	724.95	68.9	42.7	1427.9	1670.8	7.2	24.4	4.43	51.54	0.00	0.0	0.0	0.00

	SOURCE ON (HRS)	TOTAL SLUDGE PV (%)	OVERALL DP ("wc)	BED TEMP (F)	FREE BOARD TEMP (F)	FB O2 (%)	CO @7% (ppmvd)	OPACITY (%)	WESP KV #1 (kV)	WESP KV #2 (kV)	OIL FLOW (GPH)	OIL FLOW (GAL)	DAS DOWN (HRS)
AVERAGE		73.3	43.9	1441.8	1653.2	8.1	19.5	1.44	51.55	0.00	6.1		
TOTAL	8177.37											43914.0	9.33
MIN VALUE		68.3	37.1	1399.5	1615.5	6.5	7.0	0.00	47.46	0.00	0.0	0.0	
MIN DATE		11/2015	10/2015	02/2015	03/2015	05/2015	07/2015	08/2015	02/2015	01/2015	07/2015	07/2015	
MAX VALUE		80.8	63.2	1487.4	1699.2	10.1	46.2	4.88	55.14	0.00	26.5	16863.2	
MAX DATE		06/2015	03/2015	05/2015	05/2015	02/2015	02/2015	11/2015	05/2015	12/2015	02/2015	02/2015	

INCINERATOR MONTHLY EMISSION REPORT2

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT

DATE CREATED: 01/12/2016 @ 08:25
PERIOD: 01/2015 - 12/2015

DATE	PROCESS CODE	NORTH SLUDGE PV (%)	SOUTH SLUDGE PV (%)	SCRUBBER DP ("wc)	VENTURI DP ("wc)	SCRUBBER WATER (gpm)	VENTURI WATER (gpm)	4TH TRAY WATER (gpm)	CO (ppmvd)	O2-D (%)	SOURCE ON (HRS)
01/2015	8	67.9	7.6	25.1	25.0	596.3	364.3	318.6	32.4	8.9	725.43
02/2015	8	42.9	28.9	12.0	24.4	580.4	372.2	338.7	37.4	10.1	651.28
03/2015	8	36.3	37.5	30.0	24.9	607.4	351.3	312.1	15.9	8.7	543.87
04/2015	8	3.8	68.3	13.3	24.8	604.5	339.1	321.9	26.8	7.3	703.35
05/2015	8	8.9	63.5	16.4	24.9	572.3	328.8	270.6	16.7	6.5	738.25
06/2015	8	60.9	19.9	15.6	24.4	590.4	320.5	291.6	14.8	7.0	681.80
07/2015	8	58.1	17.5	13.5	24.7	601.6	324.7	326.0	6.6	8.3	716.88
08/2015	8	46.5	28.0	14.3	24.6	604.7	325.6	335.3	7.5	8.1	689.45
09/2015	8	74.2	0.0	14.7	24.8	602.9	325.4	321.1	8.5	7.5	676.75
10/2015	8	48.4	21.3	11.7	28.6	593.9	309.7	304.2	15.8	8.9	650.32
11/2015	8	37.4	30.9	12.9	24.8	602.0	336.2	361.7	12.7	7.7	675.03
12/2015	8	2.1	66.6	15.2	24.9	585.9	316.2	351.7	21.8	7.1	724.95

	PROCESS CODE	NORTH SLUDGE PV (%)	SOUTH SLUDGE PV (%)	SCRUBBER DP ("wc)	VENTURI DP ("wc)	SCRUBBER WATER (gpm)	VENTURI WATER (gpm)	4TH TRAY WATER (gpm)	CO (ppmvd)	O2-D (%)	SOURCE ON (HRS)
AVERAGE		40.6	32.5	16.2	25.1	595.2	334.5	321.1	18.1	8.0	0.00
TOTAL											0.00
MIN VALUE		2.1	0.0	11.7	24.4	572.3	309.7	270.6	6.6	6.5	
MIN DATE		12/2015	09/2015	10/2015	02/2015	05/2015	10/2015	05/2015	07/2015	05/2015	
MAX VALUE		74.2	68.3	30.0	28.6	607.4	372.2	361.7	37.4	10.1	
MAX DATE		09/2015	04/2015	03/2015	10/2015	03/2015	02/2015	11/2015	02/2015	02/2015	

VEOLIA

Sent via Certified R.R.R. Mail # 7010 1200 0002 2237 0087 on Jan. 13, 2016

Jan. 13, 2016

EPA Region 7
ATTN: Biosolids Center
WWPD/WENF
11201 Renner Boulevard
Lenexa, Kansas 66219

Subject: 2015 - H1 Semi-Annual EPA Summary Report for the Naugatuck, CT. POTW

Dear Sir/Madam:

Enclosed please find the Title V Semi-Annual EPA Summary Report for the second half of calendar year 2015.

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

Sincerely,

John Batorski
Plant Manager
Veolia Water North America

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

Veolia -Naugatuck
500 Cherry Street, Naugatuck, CT 06770
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www.veoliawaterna.com

VEOLIA

Sent via Certified R.R.R. Mail 7014 1200 0002 2237 0070 on Jan. 13, 2016

Jan. 13, 2016

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

Subject: Title V Semi-Annual Monitoring Report July 1, 2015 to Dec 31, 2015.

Dear Sir/Madam:

Enclosed you will find a copy of the above referenced report that was sent to EPA. There were no exceptions to the attached report.

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

Sincerely,

Veolia Water North America-Northeast, LLC

John Batorski
Project Manager

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

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

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE1

POLLUTANT: LOW OVERALL DP
SOURCE: FB Incinerator
CEMS ID: 1234567

DATE CREATED: 01/13/2016 @ 08:33
PERIOD: 07/01/2015 - 12/31/2015

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT

EMISSION LIMITATION: 8.0 ("WC) LIMIT

MONITOR MANUF / MODEL #: Rosemount
LATEST CMS AUDIT: 11/20/2015
PROCESS UNIT(S) DESC: EMU 52

Total source operating time in reporting period: 4133.38 Hours

Emission Data Summary (1)		CMS Performance Summary (1)	
1. Duration of excess emissions in reporting period due to		1. CMS Downtime in reporting period due to	
a. Startup/shutdown	13.95	a. Monitor equipment malfunctions	0.00
b. Control equipment problems	0.00	b. Non-monitor equipment malfunctions	0.00
c. Process problems	0.00	c. Quality assurance calibration	0.00
d. Other known causes	0.63	d. Other known causes	0.00
e. Unknown causes	4.97	e. Unknown causes	0.00
2. Total duration of excess emissions	19.55	2. Total CMS Downtime	0.00
3. % of source operating time (2)	0.5%	3. % of source operating time (2)	0.0%

Notes:
(1) For opacity record all times in minutes. For gases record all times in hours.
(2) For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time both the summary report form and the excess emission report described in 60.7(c) shall be submitted.
On a separate page describe any changes since last quarter in CMS process or controls.
I certify that the information contained in this report is true accurate and complete..

Name: John Batoroski

Signature: John Batoroski

Title: Plant Manager

Date: 1-13-16

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/13/2016 @ 08:34
PERIOD: 07/01/2015 - 12/31/2015 11:00:00 PM

EXCESS EMISSION PERIODS: LOW OVERALL DP >15-MIN ("wc)

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
07/03/2015	12:40	12:58	0.32	0.2	0.1	8.0	7.8	1	SHUTDOWN PROCEDURE	N/A
07/06/2015	14:24	14:43	0.33	0.1	0.0	8.0	7.9	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
07/07/2015	08:25	08:43	0.32	0.1	0.0	8.0	7.9	1	SHUTDOWN PROCEDURE	N/A
07/28/2015	18:02	18:17	0.27	3.3	3.3	8.0	4.7	4	PROCESS OFF	CK performing bi-weekily maintenance
08/11/2015	13:31	16:12	2.70	0.1	0.3	8.0	7.9	4	PROCESS OFF	Sludge feed off
08/17/2015	07:01	07:16	0.27	0.1	0.1	8.0	7.9	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
08/17/2015	20:50	21:08	0.32	0.0	0.0	8.0	8.0	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
08/20/2015	21:12	21:38	0.45	0.0	0.0	8.0	8.0	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
08/21/2015	09:33	09:53	0.35	0.1	0.1	8.0	7.9	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
08/27/2015	12:54	13:33	0.67	0.0	0.0	8.0	8.0	4	PROCESS OFF	CK performing bi-weekily maintenance
10/02/2015	20:19	20:40	0.37	0.0	0.1	8.0	8.0	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/07/2015	22:47	23:59	1.22	0.0	0.0	8.0	8.0	4	PROCESS OFF	Sludge feed off
10/08/2015	00:00	07:08	7.15	0.0	1.4	8.0	8.0	4	PROCESS OFF	Sludge feed off
10/10/2015	12:47	13:03	0.28	4.5	1.6	8.0	3.5	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/29/2015	02:13	03:36	1.40	0.0	0.0	8.0	8.0	4	PROCESS OFF	Sludge feed off
11/02/2015	09:47	10:04	0.30	2.5	1.2	8.0	5.5	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
11/16/2015	06:59	07:26	0.47	0.0	0.0	8.0	8.0	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
11/30/2015	08:19	08:45	0.45	0.5	0.1	8.0	7.5	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
12/01/2015	07:30	07:46	0.28	0.1	0.1	8.0	7.9	4	PROCESS OFF	CK performing bi-weekily maintenance
12/26/2015	12:17	12:45	0.48	0.4	0.2	8.0	7.6	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
12/27/2015	11:08	11:23	0.27	5.3	5.3	8.0	2.7	4	PROCESS OFF	Sludge feed off
12/30/2015	00:05	00:58	0.90	0.1	0.3	8.0	7.9	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08

TOTAL HOURS: LOW OVERALL DP >15-MIN ("wc)

CODE	DURATION	PERCENT	EXPLANATION
1	0.63	3.24	SHUTDOWN PROCEDURE
4	13.95	71.36	PROCESS OFF
8	4.97	25.40	NORMAL OPERATION

INCIDENT TOTAL DURATION: 19.55

COMPANY:	VEOLIA WATER NORTH AMERICA
LOCATION:	Naugatuck, CT
SOURCE:	FB Incinerator
CEMS ID:	1234567
DATE CREATED:	01/13/2016 @ 08:34
PERIOD:	07/01/2015 - 12/31/2015 11:00:00 PM

CMS DOWNTIME: OVERALL DP ("wc)

DATE	HOUR	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
07/01/2015 - 12/31/2015	NO	INCIDENT	OCCURRED		

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE2

POLLUTANT:	O2-Dry
SOURCE:	FB Incinerator
CEMS ID:	1234567
DATE CREATED:	01/13/2016 @ 08:47
PERIOD:	07/01/2015 - 12/31/2015
COMPANY:	VEOLIA WATER NORTH AMERICA
LOCATION:	Naugatuck, CT
EMISSION LIMITATION:	13.5(%) LIMIT
MONITOR MANUF / MODEL #:	Rosemount
LATEST CMS AUDIT:	11/20/2015
PROCESS UNIT(S) DESC:	EMU 52

Total source operating time in reporting period: 4133.38 Hours

Emission Data Summary (1)		CMS Performance Summary (1)	
1. Duration of excess emissions in reporting period due to		1. CMS Downtime in reporting period due to	
a. Startup/shutdown	14.62	a. Monitor equipment malfunctions	0.00
b. Control equipment problems	0.00	b. Non-monitor equipment malfunctions	1.00
c. Process problems	0.00	c. Quality assurance calibration	4.72
d. Other known causes	0.00	d. Other known causes	47.30
e. Unknown causes	15.98	e. Unknown causes	0.00
2. Total duration of excess emissions	30.60	2. Total CMS Downtime	53.02
3. % of source operating time (2)	0.7%	3. % of source operating time (2)	1.3%

Notes:
(1) For opacity record all times in minutes. For gases record all times in hours.
(2) For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time both the summary report form and the excess emission report described in 60.7(c) shall be submitted.
On a separate page describe any changes since last quarter in CMS process or controls.
I certify that the information contained in this report is true accurate and complete.

Name: John Bastorski

Signature: John Bastorski

Title: Plant Manager

Date: 1-13-16

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/13/2016 @ 08:47
PERIOD: 07/01/2015 - 12/31/2015 11:00:00 PM

EXCESS EMISSION PERIODS: HI O2-D >60-MIN (%)

DATE	START TIME	END TIME	DURATION	AVERAGE VALUE	HI/LOW VALUE	SETPOINT	DIFFERENCE	CODE	EXPLANATION	CORRECTIVE ACTION
07/28/2015	00:37	02:30	1.90	14.3	14.8	13.5	0.8	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
07/28/2015	02:32	03:51	1.33	14.3	15.1	13.5	0.8	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
08/11/2015	13:31	16:20	2.83	20.4	20.5	13.5	6.9	4	PROCESS OFF	Sludge feed off
08/24/2015	20:53	22:10	1.30	14.0	14.1	13.5	0.5	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/07/2015	22:41	23:59	1.32	20.4	20.4	13.5	6.9	4	PROCESS OFF	Sludge feed off
10/08/2015	00:00	06:50	6.85	20.5	20.5	13.5	7.0	4	PROCESS OFF	Sludge feed off
10/08/2015	07:29	09:28	2.00	17.5	19.4	13.5	4.0	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/27/2015	13:58	15:36	1.65	14.8	14.9	13.5	1.3	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/27/2015	18:48	21:13	2.43	14.6	14.8	13.5	1.1	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/28/2015	00:00	01:57	1.97	14.8	15.1	13.5	1.3	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/28/2015	03:29	04:57	1.48	14.9	15.0	13.5	1.4	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/28/2015	17:20	19:14	1.92	14.6	14.8	13.5	1.1	8	NORMAL OPERATION	CORRECTIVE ACTION CODE 08
10/29/2015	00:00	03:36	3.62	19.5	20.5	13.5	6.0	4	PROCESS OFF	Sludge feed off

TOTAL HOURS: HI O2-D >60-MIN (%)

CODE	DURATION	PERCENT	EXPLANATION
4	14.62	47.77	PROCESS OFF
8	15.98	52.23	NORMAL OPERATION

INCIDENT TOTAL DURATION: 30.60

COMPANY: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID: 1234567
DATE CREATED: 01/13/2016 @ 08:47
PERIOD: 07/01/2015 - 12/31/2015 11:00:00 PM

CMS DOWNTIME: O2-D (%)

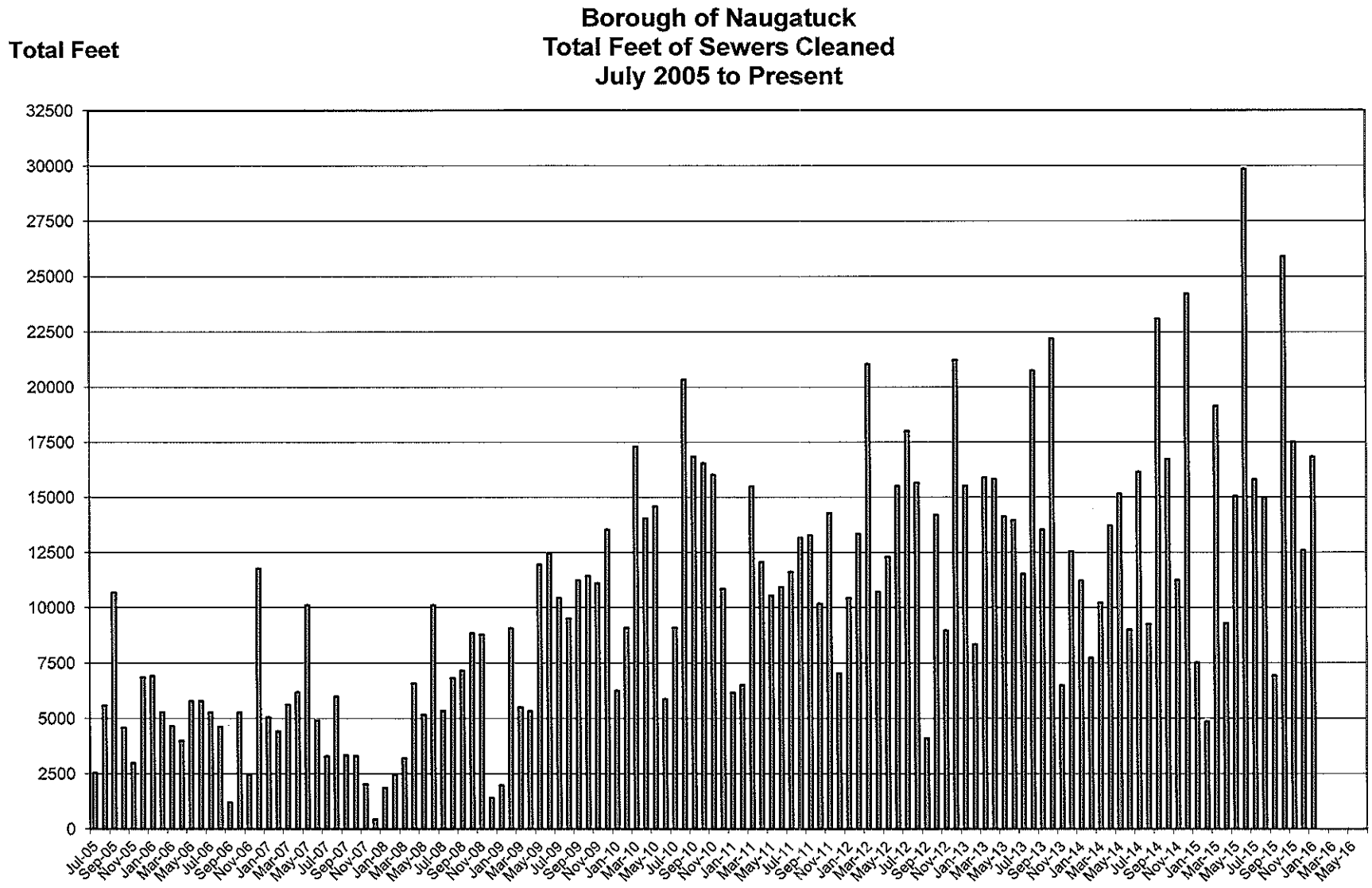
DATE	HOUR	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
07/02/2015	07	1.00	14	RECALIBRATION	N/A
07/02/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/03/2015	14	0.48	13	PROCESS DOWN	N/A
07/03/2015	15	0.02	13	PROCESS DOWN	N/A
07/03/2015	17	0.23	13	PROCESS DOWN	N/A
07/06/2015	14	0.73	13	PROCESS DOWN	N/A
07/07/2015	08	0.73	13	PROCESS DOWN	N/A
07/07/2015	11	0.02	13	PROCESS DOWN	N/A
07/10/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/10/2015	10	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/20/2015	06	0.58	13	PROCESS DOWN	N/A
07/20/2015	16	0.30	13	PROCESS DOWN	N/A
07/24/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/24/2015	10	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
07/28/2015	18	0.30	13	PROCESS DOWN	N/A
07/29/2015	15	1.00	14	RECALIBRATION	N/A
07/30/2015	13	0.73	13	PROCESS DOWN	N/A
07/31/2015	10	0.53	13	PROCESS DOWN	N/A
08/03/2015	08	0.10	13	PROCESS DOWN	N/A
08/04/2015	07	0.67	13	PROCESS DOWN	N/A
08/05/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/10/2015	12	0.47	13	PROCESS DOWN	N/A
08/11/2015	09	0.47	13	PROCESS DOWN	N/A
08/11/2015	10	0.43	13	PROCESS DOWN	N/A
08/17/2015	07	0.28	13	PROCESS DOWN	N/A
08/17/2015	14	0.47	13	PROCESS DOWN	N/A
08/17/2015	18	0.73	13	PROCESS DOWN	N/A
08/17/2015	21	0.15	13	PROCESS DOWN	N/A
08/18/2015	02	0.10	13	PROCESS DOWN	N/A
08/18/2015	09	0.67	13	PROCESS DOWN	N/A
08/20/2015	21	0.65	13	PROCESS DOWN	N/A
08/21/2015	02	0.60	13	PROCESS DOWN	N/A
08/21/2015	08	1.00	14	RECALIBRATION	N/A
08/21/2015	09	0.90	14	RECALIBRATION	N/A
08/21/2015	10	0.35	13	PROCESS DOWN	N/A
08/21/2015	13	1.00	19	SAMPLE INTERFACE MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
08/24/2015	07	0.67	13	PROCESS DOWN	N/A
08/24/2015	14	0.17	13	PROCESS DOWN	N/A
08/25/2015	13	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/27/2015	13	0.57	13	PROCESS DOWN	N/A
08/27/2015	14	0.45	13	PROCESS DOWN	N/A
08/31/2015	07	0.75	13	PROCESS DOWN	N/A
08/31/2015	13	0.30	13	PROCESS DOWN	N/A
09/01/2015	09	0.33	13	PROCESS DOWN	N/A
09/01/2015	12	0.57	13	PROCESS DOWN	N/A
09/03/2015	07	0.60	13	PROCESS DOWN	N/A
09/03/2015	08	0.22	13	PROCESS DOWN	N/A
09/08/2015	08	0.68	13	PROCESS DOWN	N/A
09/08/2015	13	0.23	13	PROCESS DOWN	N/A

DATE	HOUR	DURATION	CODE	EXPLANATION	CORRECTIVE ACTION
09/10/2015	14	0.82	14	RECALIBRATION	N/A
09/10/2015	15	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/21/2015	08	0.52	13	PROCESS DOWN	N/A
09/24/2015	06	0.67	13	PROCESS DOWN	N/A
09/24/2015	07	0.13	13	PROCESS DOWN	N/A
09/28/2015	07	0.40	13	PROCESS DOWN	N/A
09/28/2015	15	0.15	13	PROCESS DOWN	N/A
10/01/2015	07	0.42	13	PROCESS DOWN	N/A
10/01/2015	13	0.45	13	PROCESS DOWN	N/A
10/02/2015	20	0.68	13	PROCESS DOWN	N/A
10/05/2015	07	0.63	13	PROCESS DOWN	N/A
10/06/2015	07	0.50	13	PROCESS DOWN	N/A
10/06/2015	09	0.12	13	PROCESS DOWN	N/A
10/06/2015	17	0.02	13	PROCESS DOWN	N/A
10/11/2015	19	0.58	13	PROCESS DOWN	N/A
10/12/2015	05	0.45	13	PROCESS DOWN	N/A
10/12/2015	14	0.02	13	PROCESS DOWN	N/A
10/13/2015	10	0.42	13	PROCESS DOWN	N/A
10/13/2015	21	0.08	13	PROCESS DOWN	N/A
10/19/2015	08	0.48	13	PROCESS DOWN	N/A
10/19/2015	13	0.32	13	PROCESS DOWN	N/A
10/22/2015	09	0.25	13	PROCESS DOWN	N/A
10/22/2015	11	0.42	13	PROCESS DOWN	N/A
10/23/2015	10	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/23/2015	11	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
10/24/2015	08	0.50	13	PROCESS DOWN	N/A
10/24/2015	15	0.75	13	PROCESS DOWN	N/A
10/25/2015	13	0.40	13	PROCESS DOWN	N/A
10/25/2015	20	0.37	13	PROCESS DOWN	N/A
10/25/2015	23	0.35	13	PROCESS DOWN	N/A
10/26/2015	00	0.68	13	PROCESS DOWN	N/A
10/26/2015	03	0.13	13	PROCESS DOWN	N/A
10/26/2015	05	0.62	13	PROCESS DOWN	N/A
10/29/2015	03	0.62	13	PROCESS DOWN	N/A
10/30/2015	06	0.45	13	PROCESS DOWN	N/A
11/05/2015	07	0.52	13	PROCESS DOWN	N/A
11/05/2015	10	0.25	13	PROCESS DOWN	N/A
11/05/2015	12	0.25	13	PROCESS DOWN	N/A
11/06/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/06/2015	10	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/09/2015	15	0.30	13	PROCESS DOWN	N/A
11/12/2015	21	0.55	13	PROCESS DOWN	N/A
11/16/2015	07	0.45	13	PROCESS DOWN	N/A
11/20/2015	09	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
11/23/2015	04	0.38	13	PROCESS DOWN	N/A
11/24/2015	12	0.73	13	PROCESS DOWN	N/A
12/04/2015	11	1.00	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
12/14/2015	05	0.23	13	PROCESS DOWN	N/A
12/21/2015	13	0.02	13	PROCESS DOWN	N/A
12/26/2015	13	0.72	13	PROCESS DOWN	N/A

INCIDENT SUMMARY: O2-D (%)

CODE	DURATION	PERCENT	EXPLANATION
13	33.30	62.81	PROCESS DOWN
14	4.72	8.90	RECALIBRATION
19	1.00	1.89	SAMPLE INTERFACE MALFUNCTION
20	14.00	26.41	CORRECTIVE MAINTENANCE

INCIDENT TOTAL DURATION: 53.02


Borough of Naugatuck
Total Feet of Sewers Cleaned
July 2005 to Present
Total Feet
32500
30000
27500
25000
22500
20000
17500
15000
12500
10000
7500
5000
2500
0
Jul-05
Sep-05
Nov-05
Jan-06
Mar-06
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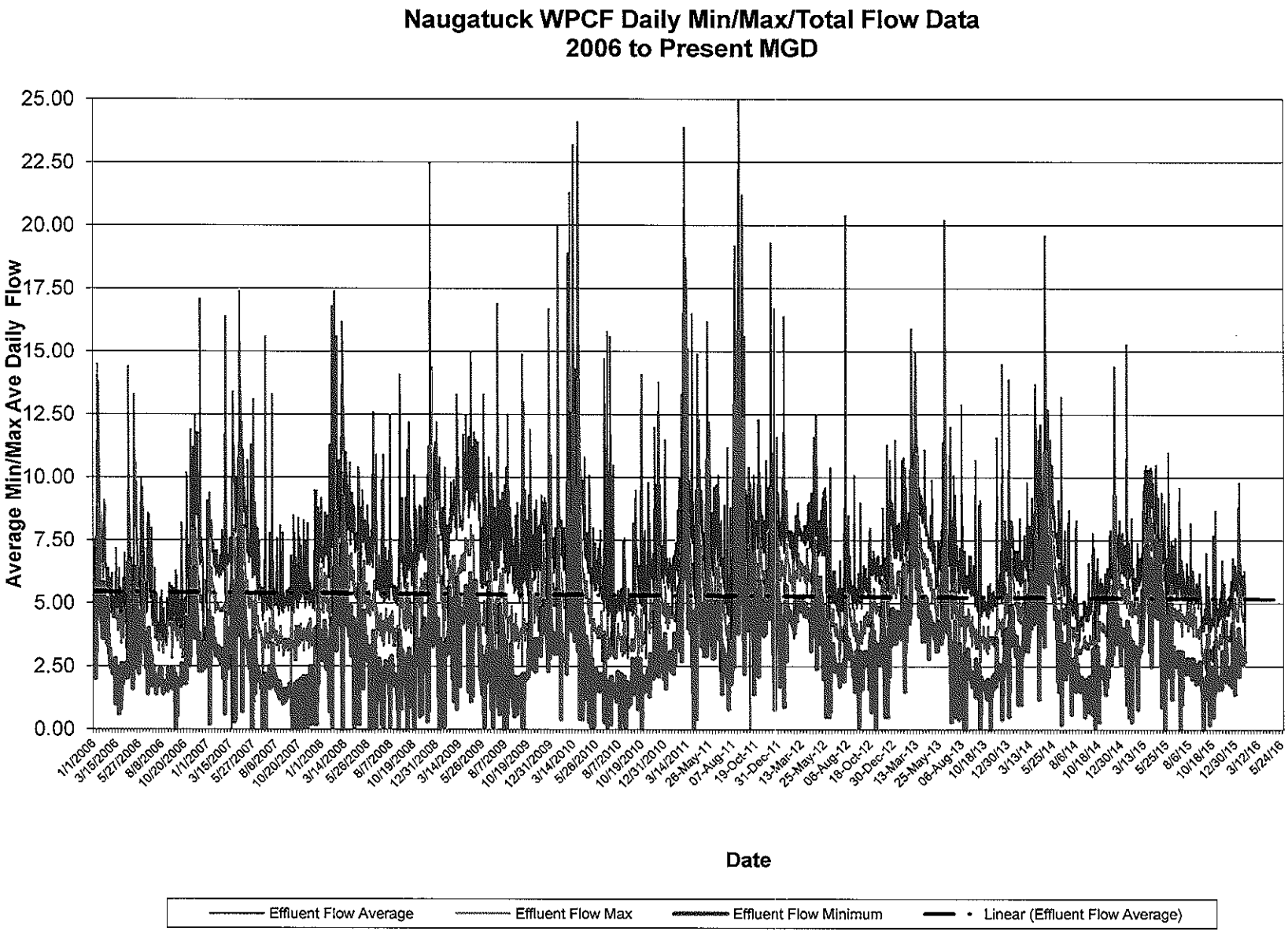
Nov-15
Jan-16
Mar-16
May-16


Naugatuck WPCF Daily Min/Max/Total Flow Data
2006 to Present MGD
Average Min/Max Ave Daily Flow
25.00
22.50
20.00
17.50
15.00
12.50
10.00
7.50
5.00
2.50
0.00
1/1/2006
3/15/2006
5/27/2006
8/8/2006
10/20/2006
1/1/2007
3/15/2007
5/27/2007
8/8/2007
10/20/2007
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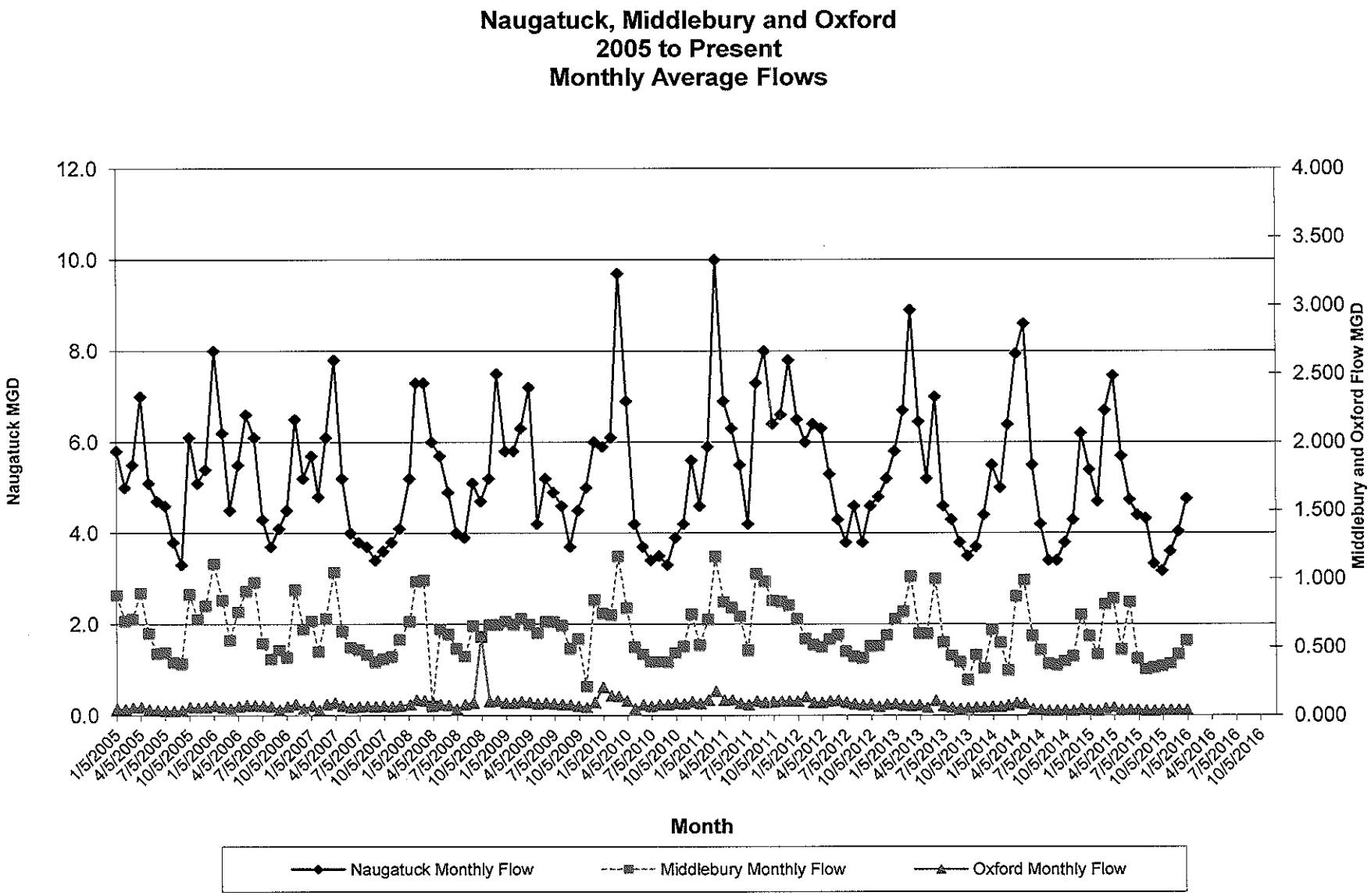
12/31/2010
3/14/2011
26-May-11
07-Aug-11
19-Oct-11
31-Dec-11
13-Mar-12
25-May-12
06-Aug-12
18-Oct-12
30-Dec-12
13-Mar-13
25-May-13
06-Aug-13
10/18/13
12/30/13
3/13/14
5/25/14
8/6/14
10/18/14
12/30/14
3/13/15
5/25/15
8/6/15
10/18/15
12/30/15
3/12/16
5/24/16
Date
Effluent Flow Average
Effluent Flow Max
Effluent Flow Minimum
Linear (Effluent Flow Average)


Naugatuck, Middlebury and Oxford
2005 to Present
Monthly Average Flows
Naugatuck MGD
Middlebury and Oxford Flow MGD
12.0
10.0
8.0
6.0
4.0
2.0
0.0
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1/5/2005
4/5/2005
7/5/2005
10/5/2005
1/5/2006
4/5/2006
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1/5/2014
4/5/2014
7/5/2014
10/5/2014
1/5/2015
4/5/2015
7/5/2015
10/5/2015
1/5/2016
4/5/2016
7/5/2016
10/5/2016
Month
Naugatuck Monthly Flow
Middlebury Monthly Flow
Oxford Monthly Flow

ODOR COMPLAINT REPORT

CALLER INFORMATION: DATE: 2/3/16 TIME: 4:14 pm

CALL TAKEN BY: Odor hotline

NAME OF COMPLAINTANT: Dante Paradisi PHONE NUMBER: 203-632-0686

ADDRESS/LOCATION WHERE ODOR IS BEING DETECTED:
54 Gunntown Rd

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)

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

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

ODOR CONTROL EQUIPMENT STATUS:

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

FILTER BLDG SCRUBBER: ON ___ OFF ___ PH ___ ORP ___ 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: ___ DATE: ___ TIME: ___

RETURN CALL MADE BY: ___ DATE: ___ TIME: ___

RETURN CALL RESULTS:

Left message w/ Scott @ Oxford - not a Naugatuck issue, an Oxford Trunk line issue

63011rev1

ODOR COMPLAINT REPORT

CALLER INFORMATION: DATE: 2/3/16 TIME: 4:19 pm

CALL TAKEN BY: Odor hotline

NAME OF COMPLAINTANT: Benjamin Trow PHONE NUMBER: 203-907-5646

ADDRESS/LOCATION WHERE ODOR IS BEING DETECTED:
1368 Rubber Ave

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)

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

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

ODOR CONTROL EQUIPMENT STATUS:

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

FILTER BLDG SCRUBBER: ON ___ OFF ___ PH ___ ORP ___ 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: ___ DATE: ___ TIME: ___

RETURN CALL MADE BY: ___ DATE: ___ TIME: ___

RETURN CALL RESULTS:

left message w/ Scott @ Oxford -

not a Naugatuck issue, an Oxford Trunk line issue

63011rev1

Sewage makeover snag

Leaders trying to finalize update plans

BY PAUL SINGLEY
REPUBLICAN-AMERICAN

NAUGATUCK — Borough leaders are trying to find the most cost effective and comprehensive plan to make federally mandated upgrades to the local sewage treatment facility.

Last week, Mayor N. Warren "Pete" Hess and other local officials met with representatives from the Environmental Protection Agency in Boston to discuss the manner in which Naugatuck will meet the mandates. The mandates are intended to remove air and water pollutants, including phosphorus, from the sewage treatment process nationwide. All told, the project is expected to cost Naugatuck about $86 million, and Naugatuck is expected to have a plan by the middle of March.

"The glitch is that we can't get the financing without either having the voters approve it at a referendum (voters rejected a bonding package to pay a portion of it already) or in the alternative, getting an order or other form of written consent from EPA," Hess said. "And we are in the process of meeting and agreeing with them as to exactly what will be done and when it will be done; our engineers are working with them to reach a resolution."

All communities that do not comply with environmental upgrade mandates could face stiff penalties. Hess said that will not be a problem for Naugatuck as he said the borough

See **SEWAGE**, *Page* **5B**

Icy waters at Quassy

SEWAGE: EPA compliance will be costly

will indeed comply with the requirements.

Naugatuck's plan calls for about $30 million for phosphorous removal as the EPA wants to reduce the amount of phosphorous that is emitted from sewage treatment plants over the next four years.

About $15 million will go to miscellaneous repairs and another $10 million will go to repairs to the siphon system and miscellaneous upgrades to the incinerator, said Public Works Director Jim Stewart.

Other costs will go to sewer rehabilitation, a design plan and contingency. The town of Middlebury will pay about $10.7 million toward the repairs because it ties into the system.

Oxford does too, and officials in both towns are working on a payment agreement, Stewart said.

Naugatuck has already bonded $2.16 million to have consultants develop a plan for the project. The planning process is ongoing, Hess said.

"WE ARE WORKING ON A SHORT-TERM PLAN FOR IMMEDIATE COMPLIANCE AND A LONG TERM PLAN FOR THE FUTURE, WHICH WILL INCLUDE A WHOLE HOST OF ISSUES RELATING TO AIR QUALITY, WATER QUALITY AND ALSO THE REMEDIATION OF THE LAND AT THE CHEMTURA, WHICH IS 86.5 ACRES."

N. WARREN 'PETE' HESS
NAUGATUCK MAYOR

"We are working on a short-term plan for immediate compliance and a long term plan for the future, which will include a whole host of issues relating to air quality, water quality and also the remediation of the land at the Chemtura (former Uniroyal property), which is 86.5 acres," he said.

Naugatuck is trying to come up with an alternative technology to incineration that would be better for greenhouse gas emissions, would lower the electricity use at the plant and have other benefits for the environment. Other similar plans have been approved by the EPA around the country, Hess said.

"We want to create what is called a resource recovery facility rather than a waste water treatment facility, which would achieve net-zero electricity needs and recover nitrogen and phosphorous," he said.

The borough could then find a market for its greywater, which could be sold to businesses that would set up on property adjoining the treatment plant — on the Chemtura property near the sewage treatment plant on Cherry Street Extension. The phosphorus could be used for fertilizer, Hess said.

The technology could be implemented at the end of Naugatuck's current contract with Veolia Water North America, which operates the plant under a long-term agreement with Naugatuck. That contract expires in six years.

"So instead of having phosphorus going into the river, you would sell it with fertilizer so you would have less phosphorous, no incineration — so better air quality, and the land at Uniroyal (Chemtura) would be remediated," he said. "So the plan we're proposing to the EPA is better for the air, water, land and environment as a whole."

REVIEW: IRS probing hospital's suitor

its plans for Eastern Connecticut Health Network, as well at Waterbury Hospital, in its optimism.

The Office of Health Care Access, which must review the proposed deals, would only say these issues are under review by the attorney general's office, said spokesman William Gerrish of the state Department of Public Health.

Los Angeles-based Prospect is "currently undergoing an IRS examination" for fiscal year 2012, according to consolidated financial statements for fiscal 2014 and 2015 filed Dec. 24 with state regulators at their request.

In its statement, Prospect noted that the IRS can investigate anyone, any time: "Businesses with significant fixed assets and employees, such as large health care providers and hospitals, are often more likely to be selected by the IRS for examination."

Documents show that the company, owned by private equity firm Leonard Green & Partners, also is being reviewed by the Franchise Tax Board of California for refunds claimed on its California returns reflecting "additional Enterprise tax credits."

PROSPECT IN ITS STATEMENT said that review followed a claim for refund attributable to authorized state tax incentives given when hiring disadvantaged workers.

The state Office of Health Care Access and the state Office of the Attorney General requested these statements on Dec. 11 upon noticing they were absent from previous filings related to Prospect's efforts to buy Manchester Memorial and Rockville General hospitals.

The financial statements, prepared Dec. 10 by an independent auditor, also revealed that in 2015 Prospect had $782.9 million in assets. They also showed that the firm had that same amount in liabilities and stockholder equity, but more than half that amount — $422.7 million — was in long-term debt.

They also show that Prospect pays Leonard Green a yearly fee of $1 million for investment banking, management, financial planning, advisory and consulting services and reimburses it for related expenses up to $50,000 in connection with major financial transactions. Prospect also pays "additional customary fees" for such deals from time to time but no payments were made in 2014 or 2015.

The state Office of the Attorney General declined to comment on how the IRS examination by Prospect, the review by the state of California or the company's long-term debt may affect its decision to approve or deny the proposals to acquire the Connecticut hospitals.

GREATER WATERBURY HEALTH NETWORK and Eastern Connecticut Health Network recently submitted additional requested information to the Office of the Attorney General and the Office of Health Care Access, which will begin 120-day, separate reviews of each application once each one is deemed complete.

They will then make a decision to either approve, approve with conditions or deny the applications.

Contact Michael C. Juliano at mjuliano@rep-am.com.