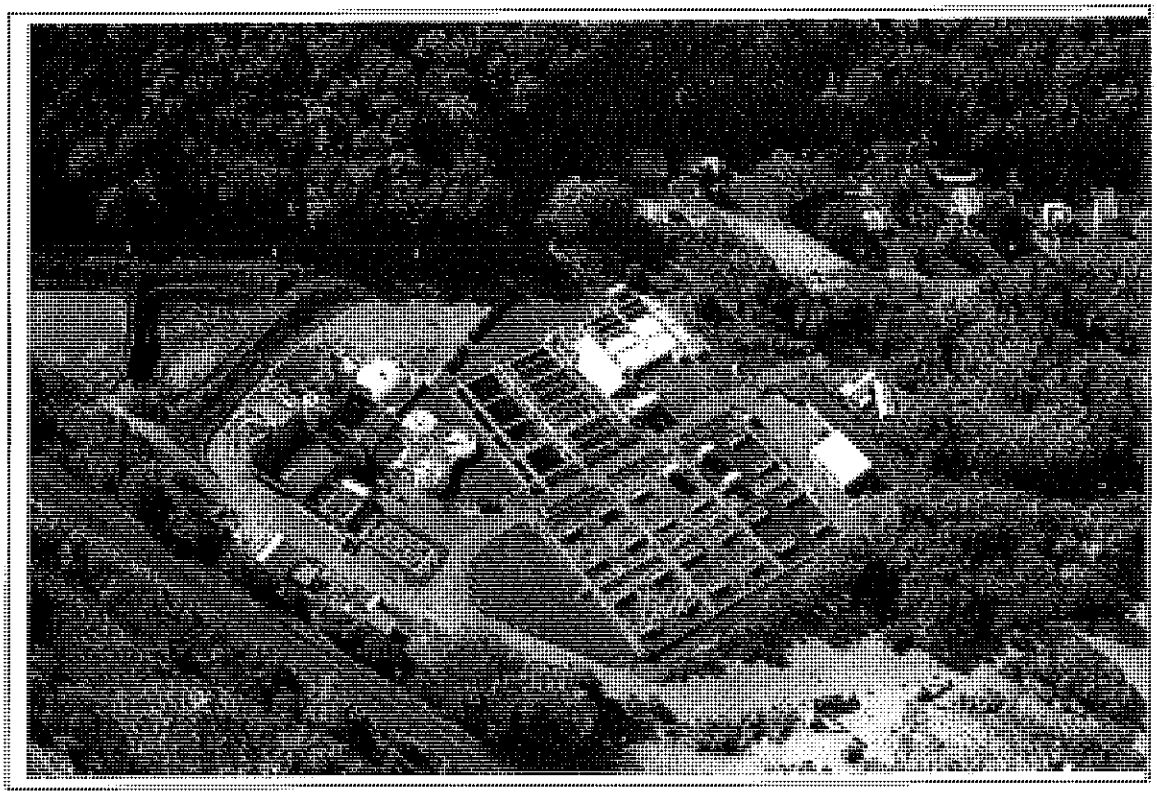

Borough of Naugatuck
Water Pollution Control Facility
Monthly Operating Report
October 2013

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VEOLIA
WATER

November 11, 2013

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

Re: **October 2013 Monthly Operating Report**

Dear Mr. Merancy:

Enclosed please find Veolia Water's Monthly Operating Report for the month of October 2013.

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, 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 October 2013

This report summarizes the activities at the Borough POTW for October 2013:

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.	-	262
Effluent Avg.	30	5
Removal Efficiency	85%	98%

Plant Process Data*	Limit	Actual
Carbonaceous BOD		
Influent Avg.	-	180
Effluent Avg.	30	4
Removal Efficiency	85%	98%

Discharge Permit Exceedance: None

	Naugatuck	Middlebury	Oxford	OTR
Oct. Flow Avg. (MGD)	3.5	0.259	0.054	N/A
Sludge Liquid Total (MGal)				4030.2
Sludge Cake Total (Wet Tons)				5962.8
Septage Total (MGal)	46,475	57,000	225,850	827,700

Discharge Permit Exceedance: None

Safety Incidents and Odor Complaints

	Month	YTD
Recordable Accidents	0	1
Lost Time Accidents	0	1
Odor Complaints	2	17
Unconfirmed Odor Complaints	0	1

1. **Compliance & Regulatory Issues**
   a. There were two recorded Odor Complaints for October 2013. On Oct 2, an odor complaint was logged from the Meadowbrook area. On Oct 9, 2013 Phil Schnell from CTDEEP visited the site regarding an odor complaint on Oct 8. The Oct 8th complaint alleged there was a strong perfume smell coming from the facility. In addition, during a tour of the facility on Oct 9, no odors were detected other than a cake truck that dumped. That odor dissipated quickly and the inspector agreed there was no issue.

2. **Personnel**
   a. A licensed Electrician was hired effective Oct 28, 2013.

3. **Health & Safety**
   a. Confined Space refresher training will be held Monday, Nov 4. Two Borough personnel were able to attend the class.

Borough of Naugatuck
Monthly WPCF Report October 2013

4. **Operational Information**
   a. The new hot oil cooler should be mounted in the new location by the end of November.
   b. Aeration tank #3 developed a leak near the condensate drain line that was repaired the Oct 4, 2013.

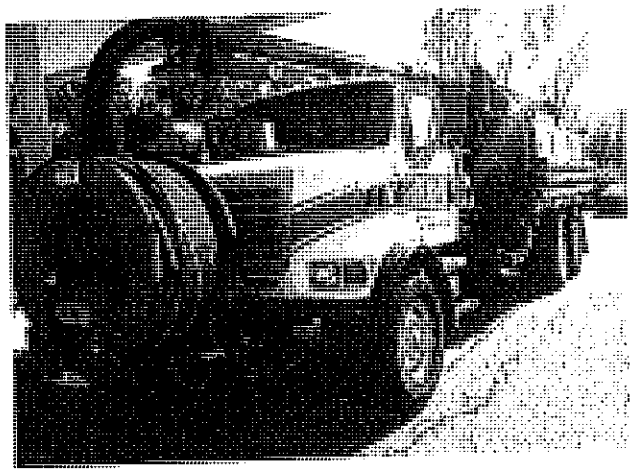
5. **Collections**
   a. A siphon near Route 8 requires repair as the structure surrounding the siphon has failed. Since the siphon is next to a bridge, CTDOT, Bridge Repair must approve the repairs. Kleinfelder will provide drawings for Jim Stewart regarding the repairs.
   b. Several feet of lateral must be replaced for a series of homes connected to a single lateral near Lounsbury Street. One section of the lateral dropped and was replaced. Further CCTV investigation revealed root balls near the end of the lateral. That section of the lateral will have to be replaced as we are not able to cut through the roots. The Collections crew has thus far 60 hours at regular time and 10 hours overtime thus far responding to this issue. Laterals are not in the contract thus we will invoice the Borough for this work plus any additional work. We are getting an estimate to replace the pipe that has the root balls.
   c. The request for a flowmeter at the Platts Mill pump station has taken longer than anticipated. While the flowmeter itself will cost approximately $2000, the installation is challenging. Details will follow as they become available.

6. **Maintenance**
   a. The new sludge transfer pump was installed.
   b. The transformer for the WESP failed and was replaced.
   c. A third raw sewage pump was ordered and will not arrive until 2014.
   d. The main bearings on the silo bottom conveyors require replacement. That task should be completed by the end of November.
   e. The starter for the ID fan failed and was replaced.
   f. A bearing fault (cage fault) on the ID fan 400 HP motor required that the motor be changed sooner than original scheduled. On Oct 18th, the motor was replaced in 5 hours. The fan bearings will be scheduled for replacement on November 5, 2013. That will take an estimated 12 hours.
   g. CCC-2 cross conveyor cracked and was repaired.

7. **Capital Projects**
   a. The new aeration blowers are in operation.

Borough of Naugatuck
Collections Systems Report
October 2013

VEOLIA WATER



	Calls for Service
1	287 N. Main st lateral line issue 10/17/13 (Lounsbury Rd)
2	
3	
4	
5	

This Month	Year to Date
1	5

	Calls Caused By Collection System
1	None
2	
3	
4	

Reason

High Velocity Cleaning

6 month list

Call for service

	Street Name	Date	Footage
1	Pheonix Ave 10-174 > 10-176	1-Oct	400
2	Woodcrest Cir 10-76 > 10-77	1-Oct	225
3	S.Cir Easement	2-Oct	450
4	Ward st 10-214 > 12-17	7-Oct	575
5	Spencer st 9-221 > 9-222	7-Oct	550
6	Sunburst 11-25 > 11-23	9-Oct	625
7	Corn Tassle 11-47 >11-24	9-Oct	330
8	Morningmist 11-26 > 11-102	10-Oct	400
9	Snow Crystal 11-25 > 11-26	10-Oct	550
10	Sunburst 11-25 > 11-26	10-Oct	300
11	Irving st 9-235 > 9-234	11-Oct	300
12	9-234 > 9-233	11-Oct	300
13	9-233 > 9-232	11-Oct	200
14	Melbourne st 9-126 > 9-127	15-Oct	550
15	Harlow ct 5-111 > 5-113	15-Oct	335
16	Irving st 9-232 > 9-231	15-Oct	150
17	9-231 > 9-232	15-Oct	150
18	stonybrook easement 2-64 > 2-72	16-Oct	300
19	Gorman st 9-71 > 12-6	16-Oct	200
20	9-70 > 9-57	16-Oct	125
21	9-57 > 9-54	16-Oct	635
22	9-76a > 9-75	16-Oct	730
23	N.Main st 7-87 > 7-260	17-Oct	420
24	7-70a > 7-286	17-Oct	725
25	7-260a > 7-260	17-Oct	260
26	Millville Ave 6-115 > 6-167	17-Oct	225
27	Ward st 10-213b > 10-214	17-Oct	300
28	Church st 9-2 > 9-211d	17-Oct	350
[illegible]	Quinn st 6-293 > 6-293a	18-Oct	300
30	6-173 > 6-171	18-Oct	500
31	6-171 > 6-166	18-Oct	300
32	6-238 > 6-236	18-Oct	800
33	Mulberry st 11-2 > 11-3	22-Oct	300
34	Southview st 9-193a > 9-193c	24-Oct	300
35	Fairview Ave 9-193a > 9-193b	24-Oct	245
36	9-195 > 9-195a	24-Oct	345
37	N. Hoadley st 6-146a > 6-145	29-Oct	565
38	6-145 > 6-144	29-Oct	355
39	6-144 > 6-115	29-Oct	250
40	6-242 > 6-241	29-Oct	405
41	6-241 > 6-240	29-Oct	390
42	Damson Ln 6-252 > 6-240	29-Oct	180
43	N. Hoadley st 6-269 > 6-267	30-Oct	420
44	6-267 > 6-262	30-Oct	340
45	6-262 > 6-239	30-Oct	300
46	6-239 > 6-240	30-Oct	260
47	Surrey dr 6-239 > 6-236	30-Oct	265
48	Quinn st 6-235 > 6-233	30-Oct	545
49	6-227 > 6-225	30-Oct	400
50	6-232 > 6-225	30-Oct	205
51	Brennan st 7-42 > 7-51	31-Oct	480
52	Crown st	31-Oct	440
53	Diamond st 7-41 > 7-52	31-Oct	200
54	High st 10-150 > 10-150a	31-Oct	620
55	10-137a > 10-139	31-Oct	275
56	Porter Ave 3-10 > 2-30	31-Oct	160
57	Spring st 2-14 > 2-14a	31-Oct	225
58	Spring st 7-16 > 7-41	31-Oct	500
[illegible]	Sweeney st 6-179	31-Oct	190
[illegible]	Hill Side 6-177 > 6-180	31-Oct	475
61			1

This Month		Year to Date	
22196	Feet	68187	Feet

Root Treatment

	Street Name	Type	Footage
1	none		
2			
3			1

This Month		Year to Date	
1	Feet	4682	Feet

Video Inspections

	Street Name	Type	Footage
1	clean out at 145 Union City rd	cctv	75
2	287 N.main lateral (Lounsbury Rd)	cctv	80
3	145 Union City Rd	cctv	80
4	287 N.main lateral (Lounsbury Rd)	cctv	50
5			1

This Month		Year to Date	
286	Feet	1712	Feet

Pump Station Services

	Work performed	Location	Date	Notes
1	weekly pump station check	all 5	10/3/2013	
2	weekly pump station check	all 5	10/11/2013	
3	weekly pump station check	all 5	10/18/2013	
4	weekly pump station check	all 5	10/25/2013	
5				
6				
7				

Vac Truck Information

Days out of the plant working		
This Month	YTD	Remaining
16	61	89

Fuel Information	Fuel Cost	Fuel Used		YTD Gallons	
	$166.06	38.8	Gallons	434.8	Gallons
	$132.98	31.1	Gallons		
	$222.84	52.1	Gallons		
			Gallons	YTD Fuel Cost	
This Months Total	$521.88	121.9	Gallons	$1,969.55	

	Mileage		Engine Hours
Month Start	167635.7	Month Start	4581
Month End	168535	Month End	4638
Total	899.3	Total	57

Utility Truck Information

Fuel Cost	Fuel Used		YTD Gallons
$120.00	28.04	Gallons	140.75
		Gallons	
		Gallons	YTD Fuel Cost
		Gallons	$585.00
$120.00	**28.04**	Gallons	

	Other tasks and notes
1	Oct-03 cleaned floats at hopbrook and maple/may
2	Oct-04 vac & excavate 287 N.Main st Lateral
3	Oct-04 camera the lateral at 287 N.Main
4	Oct-07 Skimmings
5	Oct-09 Camera/investigated lateral at 145 Union City rd
6	Oct-09 vac hopbrook station
7	Oct-10 fixed foot counter on vac truck
8	Oct-10 vac horton hill station
9	Oct-11 vac maple/may station
10	Oct-11 landscaped platts mill
11	Oct-16 hopbrook grease tank vac out
12	Oct-22 camera 287 N. Main st lateral and dye tested
13	Oct-24 landscaped maple/may
14	Oct-28 changed hydro filters on vac truck
15	Oct-28 changed rubber boot on boom of vac truck
16	Oct-29 inspected smell on church st
17	Oct-30 landscaped hopbrook station
18	
19	
20	
21	
22	
23	
24	
25	

NON-CONTRACTUAL WORK PERFORMED
Lounsbury Rd lateral to North Main St sewer main

September 29th Called in for back-up vac and jet lateral	4 hours overtime- 2 employees
September 30th Vac out line	2.5 hours- 2 employees
October 1st Vac out line	2.5 hours- 2 employees
October 2nd Vac out line	2.5 hours- 2 employees
October 3rd Vac out line	2.5 hours- 2 employees
October 4th Vac during repair of line+ camera after repair	8 hours regular + 1 hour OT- 2 employees
October 21st Removal of brush and trees Locate and mark root ball loction	8 hours regular- 2 employees
October 22nd Camera, record and dye test lateral	2 hours- 2 employees

VEOLIA
WATER

Sent via certified mail #7009 2820 0004 1018 0477

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

November 8, 2013

Re: October 2013 Reports for Naugatuck, CT WPCF, NPDES # CT0100641

Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report, Monthly Total Phosphorus, Seasonal Total Phosphorus and Nutrients Analysis Report* for the month for October 2013. The *Nutrients Analysis Report for Compliance with General Permit for Nitrogen Discharges* and the *Discharge Monitoring Report* was submitted electronically. Also enclosed is a summary of sludge sources received at this facility during the month of October.

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski
Plant Manager

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

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

Facility: Naugatuck WWTF
Sample month: Oct,2013
Facility ID: 088-001
Page 1 of MOR for permit # CT0100641

Chief Operator: John Batorski
Permit expiration date: August 7, 2006

Please return forms to: DEP-BWM
79 Elm Street
Hartford, CT 06106-5127

Date received: (stamped)

	Daily Flow			Primary Sludge			Aeration Tanks				Return sludge		Waste sludge	Dry solids to incineration	Waste accepted		CBOD (5-day)			Suspended Solids			Settleable Solids	Turbidity	Comments
	Max.	Min.	Total	Vol.	% solids	wt. lbs.	MLSS	SVI	DO Hi	DO Lo	% flow	% solids			septic	indust	Inf.	Prim. Eff.	Final Eff.	Inf.	Prim. Eff.	Final Eff.	Eff.	Eff.	
Units	mgd			gal.					mg/l				lbs	lbs	gal	gal	mg/l			mg/l			ml/l	NTU	
Freq	daily			work day			work day				work day		work day	work day	work day		Daily			Daily			work day	work day	
01	8.9	1.7	4.8				2,552	61	5.00	0.50	147	0.53	902	157,224	37,250		110	64	<4	150	93	<5	0.0	2.8	
02	7.1	2.6	5.0				4,928	37	5.00	0.20	143	1.01	10,259	134,232	32,500		170	79	<4	250	88	<5	0.0	4.0	
03	6.3	2.2	3.9				5,912	76	5.00	0.50	178	1.25	19,064	126,084	28,700								0.0	2.5	
04	7.8	0.1	1.2				6,448	79	1.80	0.20	587	1.53	0	112,683	49,300								0.0	3.0	
05	9.1	0.1	1.9						1.80	0.30	374		11,714	164,400	4,900										
06	8.9	0.1	3.6						3.60	0.30	203		6,508	167,546	1,000										
07	5.2	2.1	3.7				2,326	68	2.60	0.80	191	0.50	0	165,852	48,000		80	150	<4	190	96	<5	0.0	2.2	
08	4.8	2.1	3.4				2,528	60	3.00	0.90	192	0.55	0	168,982	63,500		170	120	<4	230	92	<5	0.0	2.8	
09	4.7	2.0	3.7				2,366	67	2.70	1.30	198	0.62	0	192,840	49,250		170	97	<4	290	68	<5	0.0	2.2	
10	4.5	2.0	3.5				3,062	66	2.70	1.20	199	0.47	396	173,958	42,700								0.0	2.1	
11	4.8	1.9	3.6				1,478	89	5.00	1.30	201	0.27	0	183,672	52,600								0.0	2.4	
12	5.3	1.8	3.5						2.70	1.30	202		0	191,064	7,000										
13	5.0	1.9	3.6						2.50	0.90	198		0	189,300	0										
14	5.0	1.7	3.6				2,024	66	2.30	0.80	198	0.49	0	185,772	63,950		200	100	<4	200	66	<5	0.0	3.7	
15	5.0	1.9	4.1				2,170	62	2.40	0.90	191	0.51	0	161,472	45,750		140	150	<4	340	93	<5	0.0	2.3	
16	4.7	1.9	3.2				2,088	64	2.40	0.90	218	0.53	451	166,416	59,500		150	102	<4	300	73	<5	0.0	2.5	
17	4.8	1.6	3.5				2,220	72	2.60	0.90	195	0.38	0	160,270	49,950								0.0	3.5	
18	5.3	1.8	3.3				2,622	68	2.10	0.90	203	0.50	0	109,206	35,450								0.0	3.1	
19	4.9	1.9	3.7						2.30	0.50	202		851	180,108	3,000										
20	5.1	1.7	3.5						2.40	0.70	200		0	190,800	2,000										
21	4.9	1.6	3.4				2,268	49	2.50	0.90	204	0.39	0	167,640	46,000		210	130	<4	350	87	<5	0.0	2.6	
22	4.8	1.7	3.6				2,766	69	5.00	0.70	207	0.60	0	175,752	55,000		210	170	<4	300	58	<5	0.0	3.8	
23	4.7	1.5	3.6				2,792	64	2.50	0.90	197	0.75	0	180,480	60,250		250		<4	310		<5	0.0	7.3	
24	4.8	1.6	3.6				2,962	62	5.00	0.80	136	0.47	2,077	163,116	49,200								0.0	3.9	
25	4.5	1.5	3.1				1,036	38	5.00	0.80	181	0.37	0	163,680	63,750								0.0	4.3	
26	5.0	1.3	3.4						3.60	0.80	209		0	175,152	4,500										
27	4.9	1.3	3.4						5.00	0.80	207		0	173,004	7,000										
28	4.5	1.2	3.0				2,864	72	5.00	1.20	205	0.53	0	83,780	49,750		280	96	<4	370	62	<5	0.0	7.1	
29	5.7	1.7	3.6				2,810	76	4.20	1.00	193	0.47	396	127,926	58,050		230	110	<4	290	72	<5	0.0	3.3	
30	5.0	2.0	4.1				2,454	68	2.60	0.70	192	0.57	0	167,124	52,725		150		<4	92		<5	0.0	4.5	
31	4.4	1.7	3.5				2,272	83	4.10	1.10	187	0.59	0	156,898	34,500								0.0	3.1	
TOT			108.6										52,616	5,016,432	1,157,025										
AVG	5.5	1.6	3.5				2,824	66	2.4	1.8	211	0.6	1,697	161,820	37,323		180	114	4	262	79	5	0.0	3.4	

Page 2 of MOR for
Permit # CT100641

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

Authorized Official: John Batorski Title: Plant Manager Signature: John Batorski Date: 11-7-13

	Chlorine Dose		Chlorine Residual		Fecal Coliform	Ammonia			Nitrate			Nitrite			TKN			D.O.	pH		Ortho P	Total Phosphorus		Temp.		Zinc	Copper	Comments
			high	low		Inf.	Prim.	Eff.	Inf.	Prim.	Eff.	Inf.	Prim.	Eff.	Inf.	Prim.	Eff.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.	Inf.	Eff.	Eff.	Eff.	
Units	lbs	mg/l	mg/l		#/100 ml	mg/l			mg/l			mg/l			mg/l			mg/l	S.U.		mg/l	mg/l		Deg F		kg/d	kg/d	
Freq	Daily		4/work day		daily	weekly			weekly			weekly			weekly			week	work day		weekly	wee k		work day		work day	work day	
01	39.93	1.00				27.4	25.0	2.13	<0.01	<0.01	2.7	0.060	0.0	0.09	41.8	35.6	3.88	8.1	7.3	6.8	9.6	4.6	9.0	70	82	1.11	0.13	
02	0.00	0.00				32.6	24.8	3.66			1.8			0.24			5.40	7.4	7.1	6.9				71	84			
03	0.00	0.00																7.6	6.5	6.9				70	85			
04	0.00	0.00																7.1	7.2	6.8				70	81			
05	0.00	0.00																										
06	0.00	0.00																										
07	0.00	0.00				29.2	31.0	0.18			3.7			0.02			2.10	8.9	7.2	6.7	9.5		9.7	70	83	0.97	0.15	
08	0.00	0.00				27.8	23.8	0.29			4.8			0.02			2.15	8.0	7.3	6.8	10.2		10.1	71	85			
09	0.00	0.00				26.0	18.4	0.20			3.6			0.02			1.94	8.8	7.1	6.9				66	82			
10	0.00	0.00																7.8	7.4	6.9				67	82			
11	0.00	0.00																8.6	7.2	6.9				68	83			
12	0.00	0.00																										
13	0.00	0.00																										
14	0.00	0.00				27.8	24.8	0.13			3.3			<0.01			1.82	8.5	7.3	7.0	10.7		11.0	66	84	1.01	0.18	
15	0.00	0.00				28.8	27.2	0.22			3.3			0.01			1.95	8.2	7.3	6.9	10.0		9.9	70	85			
16	0.00	0.00				27.2	21.2	0.17			3.2			0.01			1.92	8.4	7.3	6.9				70	84			
17	0.00	0.00																8.3	7.4	7.0				68	84			
18	0.00	0.00																8.3	7.1	7.0				69	84			
19	0.00	0.00																										
20	0.00	0.00																										
21	0.00	0.00				27.2	29.2	0.20			3.6			0.02			2.04	8.5	7.3	6.8	9.6		25.8	67	79	0.72	0.13	
22	0.00	0.00				27.6	29.8	0.17			4.4			0.02			2.29	8.0	7.2	6.9	9.6		10.4	67	78			
23	0.00	0.00				25.8		0.16			3.8			0.02			2.07	7.3	7.1	7.0				68	81			
24	0.00	0.00																8.0	7.3	7.0				67	74			
25	0.00	0.00																7.9	7.0	6.9				67	76			
26	0.00	0.00																										
27	0.00	0.00																										
28	0.00	0.00				25.8	22.0	0.18			3.5			0.01			1.81	8.0	7.3	6.9	10.1		10.5	68	78	0.80	0.14	
29	0.00	0.00				29.8	24.0	0.15			3.5			<0.01			1.93	7.9	7.4	7.0	10.0		10.4	67	78			
30	0.00	0.00				28.0		0.17			3.8			0.01			1.83	7.5	7.1	7.2				67	75			
31	0.00	0.00																7.5	7.4	7.1				67	79			
TOT																												
AVG						27.9	25.1	0.57	0.0	0.0	3.5	0.1	0.0	0.04	41.8	35.6	2.37	8.0	7.2	6.9	9.9	4.6	11.9	68	81	0.92	0.14	

Nutrient Analysis Report

Town/Facility: Naugatuck WWTF

Flow Rate: 4.8 MGD

Sampling Date: 10/01/13

Parameter	Raw Influent		Primary Effluent		Final Effluent				Plant Efficiency
	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	(%)
Ammonia	27.4		25.0		2.1				
Nitrites	0.06		0.03		0.09				
Nitrates	0.0		0.0		2.7				
TKN	41.8		35.6		3.9				
Total Nitrogen	41.9	1,676	35.6	1,427	6.7	268			84
Orthophosphates	2.6	106			9.6	384			
Total Phosphorus	4.6	184			9.0	360			

Permit # CT0100641

Monthly Total Phosphorus Report

for compliance with NPDES permit

Use this report from April 1st through October 30th

Facility Name: Naugatuck

Permit # : CT0100641

Month of: October, 2013

Sample Date	Flow (mgd)	Effluent Total Phosphorus (mg/l) Max. Daily Limit - - for comparison purposes only	X	Total Phosphorus (lbs/d)
10/01/2013	4.8	9.00	8.34	360
10/07/2013	5.0	9.70	8.34	299
10/08/2013	3.9	10.10	8.34	286
10/14/2013	1.2	11.00	8.34	330
10/15/2013	1.9	9.90	8.34	339
10/21/2013	3.6	25.80	8.34	732
10/22/2013	3.7	10.40	8.34	312
10/28/2013	3.4	10.50	8.34	263
10/29/2013	3.7	10.40	8.34	312
	3.5		8.34	

Average Monthly Total Phosphorus Limit (mg/l)	Average Monthly Total Phosphorus (mg/l)	Average Seasonal Load Cap (lbs/d)	Average Monthly Total Phosphorus Load (lbs/d)
	11.87		359

asonal Total Phosphorus Report

Average from April 1st through October 30th

for compliance with NPDES permit

Submit this report by November 15th

Permit # CT0100641

onth	Average in lbs/d
pril	361
ay	365
une	264
uly	342
ugust	468
eptember	295
ctober	359

Average Seasonal Load Cap in lbs/d	Seasonal Average in lbs/d
Load Capacity N/A	351

Nutrient Analysis Report

For compliance with General Permit for Nitrogen Discharges

Facility Name: NAUGATUCK TREATMENT Co.
Permit Number: CT0100641

Month: Oct-13
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.	10/1/2013	4.8	3.88	2.8	6.7	268
NAUGATUCK TRE.	10/2/2013	5	5.4	2.06	7.5	313
NAUGATUCK TRE.	10/7/2013	3.7	2.1	3.68	5.8	179
NAUGATUCK TRE.	10/8/2013	3.4	2.15	4.79	6.9	196
NAUGATUCK TRE.	10/9/2013	3.7	1.94	3.64	5.6	173
NAUGATUCK TRE.	10/14/2013	3.6	1.82	3.33	5.2	156
NAUGATUCK TRE.	10/15/2013	4.1	1.95	3.26	5.2	178
NAUGATUCK TRE.	10/16/2013	3.2	1.92	3.22	5.1	136
NAUGATUCK TRE.	10/21/2013	3.4	2.04	3.61	5.7	162
NAUGATUCK TRE.	10/22/2013	3.6	2.29	4.43	6.7	201
NAUGATUCK TRE.	10/23/2013	3.6	2.07	3.78	5.9	177
NAUGATUCK TRE.	10/28/2013	3	1.81	3.54	5.4	135
NAUGATUCK TRE.	10/29/2013	3.6	1.93	3.47	5.4	162
NAUGATUCK TRE.	10/30/2013	4.1	1.83	3.85	5.7	195
					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	2631
					Average Pounds	187.9285714

Date of Last Calibration of Flow Meter: 7/15/2013

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 11-7-13 JS

VEOLIA WATER

Naugatuck Plant Samples by Intake Forecast Summary

Sample Date Range 10/1/2013 - 10/31/2013
Forecast Date Range 11/1/2013 - 10/31/2013
Number of Forecast Days: 0

	Forecasted New Intake	Forecasted Total
ates, Inc.		
quid Sludge		
otal Gallons: 12,000	0	12,000
otal Samples for Bates, Inc.: 2		
eacon Falls Treatment	**Forecasted New Intake**	**Forecasted Total**
iquid Sludge		
otal Gallons: 136,500	0	136,500
otal Samples for Beacon Falls Treatment: 21		
Bennett Septic	**Forecasted New Intake**	**Forecasted Total**
Septage		
Total Gallons: 282,000	0	282,000
Total Samples for Bennett Septic: 75		
Bill Dunn Sanitation	**Forecasted New Intake**	**Forecasted Total**
Septage		
Total Gallons: 74,200	0	74,200
Total Samples for Bill Dunn Sanitation: 38		
Bill Marek Excavating & Septic Systems	**Forecasted New Intake**	**Forecasted Total**
Septage		
Total Gallons: 54,000	0	54,000
Total Samples for Bill Marek Excavating & Septic Systems: 18		
Bristol	**Forecasted New Intake**	**Forecasted Total**
Cake Sludge		
Total Tons: 508.27	0	508
Total Samples for Bristol: 28		
Casella Chicopee	**Forecasted New Intake**	**Forecasted Total**
Cake Sludge		
Total Tons: 434.81	0	435
Total Samples for Casella Chicopee: 18		
Casella Glen Cove	**Forecasted New Intake**	**Forecasted Total**
Cake Sludge		
Total Tons: 286.90	0	287
Total Samples for Casella Glen Cove: 12		
Casella Suffolk NY	**Forecasted New Intake**	**Forecasted Total**

	Forecasted New Intake	Forecasted Total
ke Sludge		
tal Tons: 1,106.27	0	1,106
tal Samples for Casella Suffolk NY: 42		

asella Westfield MA	Forecasted New Intake	Forecasted Total
ake Sludge		
otal Tons: 547.69	0	548
otal Samples for Casella Westfield MA: 21		

asella Yorktown Heights	Forecasted New Intake	Forecasted Total
ake Sludge		
otal Tons: 58.04	0	58
otal Samples for Casella Yorktown Heights: 4		

hatfield	Forecasted New Intake	Forecasted Total
eptage		
otal Gallons: 13,600	0	13,600
Total Samples for Chatfield: 17		

East Coast Septic	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 196,000	0	196,000
Total Samples for East Coast Septic: 49		

Grieger Excavating	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 25,000	0	25,000
Total Samples for Grieger Excavating: 10		

Heritage Village Water	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 104,000	0	104,000
Total Samples for Heritage Village Water: 16		

HI Stone Septic	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 6,500	0	6,500
Total Samples for HI Stone Septic: 1		

Koseski Septic	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 169,500	0	169,500
Total Samples for Koseski Septic: 61		

Litchfield	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 45,500	0	45,500
Total Samples for Litchfield.		

	Forecasted New Intake	Forecasted Total
ıwood Place		
ɔage	0	39,000
l Gallons: 39,000		
l Samples for Lynnwood Place: 6		
ıopac Septic	**Forecasted New Intake**	**Forecasted Total**
ıtage	0	1,044,200
ıl Gallons: 1,044,200		
ıl Samples for Mahopac Septic: 170		
w England Septic	**Forecasted New Intake**	**Forecasted Total**
ɔtage	0	147,000
ıl Gallons: 147,000		
ıl Samples for New England Septic: 49		
w Hartford	**Forecasted New Intake**	**Forecasted Total**
ıuid Sludge	0	58,500
tal Gallons: 58,500		
tal Samples for New Hartford : 9		
ew Rochelle	**Forecasted New Intake**	**Forecasted Total**
ıke Sludge	0	1,992
ɔtal Tons: 1,992.29		
ɔtal Samples for New Rochelle: 87		
ıorth Canaan	**Forecasted New Intake**	**Forecasted Total**
ıquid Sludge	0	39,000
ɔtal Gallons: 39,000		
ɔtal Samples for North Canaan: 6		
Oxbury Sanitation	**Forecasted New Intake**	**Forecasted Total**
Septage	0	42,000
Total Gallons: 42,000		
Total Samples for Oxbury Sanitation: 14		
Pawling	**Forecasted New Intake**	**Forecasted Total**
Liquid Sludge	0	32,500
Total Gallons: 32,500		
Total Samples for Pawling: 5		
Plymouth	**Forecasted New Intake**	**Forecasted Total**
Liquid Sludge	0	97,500
Total Gallons: 97,500		
Total Samples for Plymouth: 15		
Prospect Sanitation	**Forecasted New Intake**	**Forecasted Total**
Septage	0	27,500

al Samples for Prospect Sanitation: 11

nebeck	Forecasted New Intake	Forecasted Total
ce Sludge al Tons: 19.58	0	20
al Samples for Rhinebeck: 2		

lisbury	Forecasted New Intake	Forecasted Total
quid Sludge tal Gallons: 91,000	0	91,000
tal Samples for Salisbury: 14		

helton Septic	Forecasted New Intake	Forecasted Total
eptage otal Gallons: 8,000	0	8,000
otal Samples for Shelton Septic: 4		

tratford	Forecasted New Intake	Forecasted Total
iquid Sludge otal Gallons: 806,000	0	806,000
otal Samples for Stratford: 124		

Superior Sanitation	Forecasted New Intake	Forecasted Total
Septage Total Gallons: 33,000	0	33,000
Total Samples for Superior Sanitation: 22		

Synagro	Forecasted New Intake	Forecasted Total
Cake Sludge Total Tons: 317.68	0	318
Total Samples for Synagro: 14		

Talarico Septic	Forecasted New Intake	Forecasted Total
Septage Total Gallons: 270,000	0	270,000
Total Samples for Talarico Septic: 77		

Thomaston	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 71,500	0	71,500
Total Samples for Thomaston: 11		

Torrington	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 403,000	0	403,000
Total Samples for Torri 62		

	Forecasted New Intak	Forecasted Total

›tage al Gallons: 5,000 al Samples for Tyndall: 1	0	5,000

olia Bedford Hills	Forecasted New Intake	Forecasted Total
quid Sludge tal Gallons: 19,500 tal Samples for Veolia Bedford Hills: 3	0	19,500

›olia Cranston	Forecasted New Intake	Forecasted Total
ıke Sludge ›tal Tons: 40.29 ›tal Samples for Veolia Cranston: 2	0	40

eolia Danbury	Forecasted New Intake	Forecasted Total
ake Sludge ›tal Tons: 332.16 otal Samples for Veolia Danbury: 16	0	332

'eolia Lynn, MA	Forecasted New Intake	Forecasted Total
:ake Sludge 'otal Tons: 323.03 'otal Samples for Veolia Lynn, MA: 16	0	323

Veolia North Haven	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 130,000 Total Samples for Veolia North Haven: 20	0	130,000

Veolia Pepsi	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 6,500 Total Samples for Veolia Pepsi: 1	0	6,500

Veolia Poughkeepsie	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 468,000 Total Samples for Veolia Poughkeepsie: 72	0	468,000

Veolia Redding	Forecasted New Intake	Forecasted Total
Liquid Sludge Total Gallons: 143,000 Total Samples for Veolia Redding: 22	0	143,000

Veolia Seymour	Forecasted New Intake	Forecasted Total
Cake Sludge Total Tons: 120.51 Total Samples for Veolia Seymour: 14	0	121

	Forecasted New Intake	Forecasted Total
S Ahlstrom Latex		
lustrial Waste Water		
al Gallons: 13,000	0	13,000
al Samples for VES Ahlstrom Latex : 2		
S Americas Styrenics		
dustrial Waste Water		
tal Gallons: 13,000	0	13,000
tal Samples for VES Americas Styrenics : 2		
atertown Septic		
eptage		
otal Gallons: 3,000	0	3,000
otal Samples for Watertown Septic: 1		
Vestport		
iquid Sludge		
otal Gallons: 110,500	0	110,500
otal Samples for Westport: 17		
Vindham		
Liquid Sludge		
Total Gallons: 331,500	0	331,500
Total Samples for Windham: 51		
Total Gallons for all Customers 10/1/2013 - 10/31/2013: 5,571,500	0	5,571,500
Total Tons for all Customers 10/1/2013 - 10/31/2013: 6,087.52	0	6,088
Total Samples for all Customers 10/1/2013 - 10/31/2013: 1382		

Connecticut DEP

Edit DMR

Permit

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

Report Dates & Status

Monitoring Period:	From 10/01/13 to 10/31/13	**DMR Due Date:**	11/15/13
Status:	**NetDMR Validated**		

Considerations for Form Completion

MONTHLY AVERAGE CONCENTRATIONS SHALL NOT BE EXCEEDED BY > 1.5 DURING ANY WEEK.GRAB SAMPLES SHALL BE TAKEN DURINGPERIODS OF DAILY PEAK FLOW.SAMPLES COLLECTED FOR BACTERIOLOGICAL EXAM SHALL BE COLLECTED BTW 11AM & 3PM OR DURING PEAK HORLY FLOW.

Principal Executive Officer

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

No Data Indicator (NODI)

Form NODI:

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
00011	Temperature, water deg. fahrenheit	Smpl.						= 65	deg F		01/01	GR
1 - Effluent Gross												
Season: 0		Req.						Req Mon Instantaneous Maximum	Degrees Fahrenheit		Daily	GRAB
NODI:		NODI										
00300	Oxygen, dissolved [DO]	Smpl.				= 7.1			mg/L		01/01	GR
1 - Effluent Gross												
Season: 0		Req.				>= 5.0001 Instantaneous Minimum			Milligrams per Liter		Daily	GRAB
NODI:		NODI										
00400	pH	Smpl.				= 6.7		= 7.2	SU		01/01	GR
1 - Effluent Gross												
Season: 0		Req.				>= 6 Instantaneous Minimum		<= 9 Instantaneous Maximum	Standard Units		Daily	GRAB
NODI:		NODI										
00410	Alkalinity, total [as CaCO3]	Smpl.						= 70	mg/L		01/30	GR
1 - Effluent Gross												
Season: 0		Req.						Req Mon Instantaneous Maximum	Milligrams per Liter		Monthly	GRAB
NODI:		NODI										
00530	Solids, total suspended	Smpl.					= 5	= 5	mg/L		12/30	CP
1 - Effluent Gross												
Season: 0		Req.					<= 30 Monthly Average	<= 45 Daily Maximum	Milligrams per Liter		Twelve Per Month	COMPOS
NODI:		NODI										
00530	Solids, total suspended	Smpl.					= 252		mg/L		12/30	CP
G - Raw Sewage Influent												

Sent electronically 11-7-13 JB

Parameter Code	Name	NODI	Quantity or Loading Value 1	Value 2	Units	Quality or Concentration Value 1	Value 2	Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
Season: 0		Req.					Req Mon Monthly Average		Milligrams per Liter		Twelve Per Month	COMPOS
NODI:		NODI										
00545	Solids, settleable	Smpl.						< 0.01	mL/L		01/07	GR
1 - Effluent Gross												
Season: 0		Req.						Req Mon Instantaneous Maximum	Milliliters per Liter		Weekly	GRAB
NODI:		NODI										
00600	Nitrogen, total	Smpl.						= 7.5	mg/L		01/30	CP
1 - Effluent Gross												
Season: 0		Req.						Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
NODI:		NODI										
00600	Nitrogen, total	Smpl.	= 187		lb/d						02/07	CP
C - Nitrogen, Removal Complete												
Season: 0		Req.	Req Mon Monthly Average		Pounds per Day						Twice Every Week	COMPOS
NODI:		NODI										
00610	Nitrogen, ammonia total [as N]	Smpl.					= 0.6	= 3.7	mg/L		12/30	CP
1 - Effluent Gross												
Season: 4		Req.					<= 8 Monthly Average	Req Mon Daily Maximum	Milligrams per Liter		Twelve Per Month	COMPOS
NODI:		NODI										
00615	Nitrogen, nitrite total [as N]	Smpl.						= 0.24	mg/L		01/30	CP
1 - Effluent Gross												
Season: 0		Req.						Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
NODI:		NODI										
00620	Nitrogen, nitrate total [as N]	Smpl.						= 4.8	mg/L		01/30	CP
1 - Effluent Gross												
Season: 0		Req.						Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
NODI:		NODI										
00625	Nitrogen, Kjeldahl, total [as N]	Smpl.						= 5.4	mg/L		01/30	CP
1 - Effluent Gross												
Season: 0		Req.						Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
NODI:		NODI										
00665	Phosphorus, total [as P]	Smpl.						= 25.8	mg/L		01/30	CP
1 - Effluent Gross												
Season: 0		Req.						Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
NODI:		NODI										
01002	Arsenic, total [as As]	Smpl.						= 3.8	mg/kg		01/60	GR
S - See Comments												
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
NODI:		NODI										
01012	Beryllium, total [as Be]	Smpl.						< 0.42	mg/kg		01/60	GR
S - See Comments								Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
Season: 0		Req.										
NODI:		NODI										
01027	Cadmium, total [as Cd]	Smpl.						< 0.0002	mg/L		01/30	CP
1 - Effluent Gross								Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
Season: 0		Req.										
NODI:		NODI										
01042	Copper, total [as Cu]	Smpl.	= 0.14	= 0.18	kg/d						01/07	CP
1 - Effluent Gross											Weekly	COMPOS
Season: 0		Req.	<= 1.4 Monthly Average	<= 2.58 Daily Maximum	Kilograms per Day							
NODI:		NODI										
01077	Silver, total [as Ag]	Smpl.						< 0.001	mg/L		01/30	CP
1 - Effluent Gross								Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
Season: 0		Req.										
NODI:		NODI										
01092	Zinc, total [as Zn]	Smpl.	= 0.92	= 1.11	kg/d						01/07	CP
1 - Effluent Gross											Weekly	COMPOS
Season: 0		Req.	<= 4.85 Monthly Average	<= 11.11 Daily Maximum	Kilograms per Day							
NODI:		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	= 3.5		MGD						99/99	TM
1 - Effluent Gross											Continuous	TOTALZ
Season: 0		Req.	<= 10.3 Monthly Average		Million Gallons per Day							
NODI:		NODI										
70507	Phosphorous, in total orthophosphate	Smpl.						= 10.7	mg/L		01/30	CP
1 - Effluent Gross								Req Mon Daily Maximum	Milligrams per Liter		Monthly	COMPOS
Season: 0		Req.										
NODI:		NODI										
78467	Zinc, dry weight	Smpl.						= 835	mg/kg		01/60	GR
S - See Comments								Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
Season: 0		Req.										
NODI:		NODI										
78468	Lead, dry weight	Smpl.						= 49.6	mg/kg		01/60	GR
S - See Comments								Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
Season: 0		Req.										
NODI:		NODI										
78469	Nickel, dry weight	Smpl.						=	mg/kg		01/60	GR

Parameter Code	Name	NODI	Quantity or Loading Value 1	Value 2	Units	Quality or Concentration Value 1	Value 2	Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
S - See Comments								23.7				
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
NODI:		NODI										
78471	Mercury, dry weight	Smpl.						= 1.06	mg/kg		01/60	GR
S - See Comments												
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
NODI:		NODI										
78473	Chromium, dry weight	Smpl.						= 40.9	mg/kg		01/60	GR
S - See Comments												
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
NODI:		NODI										
78475	Copper, sludge, tot, dry weight [as Cu]	Smpl.						= 665	mg/kg		01/60	GR
S - See Comments												
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
NODI:		NODI										
78476	Cadmium, sludge, tot dry weight [as Cd]	Smpl.						= 2.24	mg/kg		01/60	GR
S - See Comments												
Season: 0		Req.						Opt Mon Instantaneous Maximum	Milligrams per Kilogram		Once Every 2 Months	GRAB
NODI:		NODI										
80126	BOD, carbonaceous, 5 day, 5 C	Smpl.					= 4	= 4	mg/L		12/30	CP
1 - Effluent Gross												
Season: 1		Req.					<= 30 Monthly Average	<= 40 Daily Maximum	Milligrams per Liter		Twelve Per Month	COMPOS
NODI:		NODI										
80126	BOD, carbonaceous, 5 day, 5 C	Smpl.					= 180		mg/L		12/30	CP
G - Raw Sewage Influent												
Season: 0		Req.					Req Mon Monthly Average		Milligrams per Liter		Twelve Per Month	COMPOS
NODI:		NODI										
81011	Solids, suspended percent removal	Smpl.				= 93			%		01/30	CA
K - Percent Removal												
Season: 0		Req.				>= 85 Minimum Percent Removal			Percent		Monthly	CALCTD
NODI:		NODI										
81383	Carbonaceous oxygen demand, % removal	Smpl.				= 93			%		01/30	CA
K - Percent Removal												
Season: 0		Req.				>= 85 Minimum Percent Removal			Percent		Monthly	CALCTD
NODI:		NODI										

Parameter Code	Parameter Name	NODI	Quantity or Loading Value 1	Quantity or Loading Value 2	Quantity or Loading Units	Quality or Concentration Value 1	Quality or Concentration Value 2	Quality or Concentration Value 3	Quality or Concentration Units	# of Ex.	Freq. of Analysis	Smpl. Type
TGA3D	Pass/Fail Static 48Hr Acute D. Pulex	Smpl.					= 0		pass=0;fail=1		01/90	CP
T - See Comments												
Season: 0		Req.					Req Mon Average		Pass=0; Fail=1		Quarterly	COMPOS
NODI:		NODI										
TGA6C	Pass/Fail Static 48Hr Acute Pimephales	Smpl.					= 0		pass=0;fail=1		01/90	CP
T - See Comments												
Season: 0		Req.					Req Mon Average		Pass=0; Fail=1		Quarterly	COMPOS
NODI:		NODI										

Edit Check Errors

No results.

Comments

Attachments

No results.

Report Last Saved By

User: John.Batorski@Veoliawaterna.com
Name: John Batorski
E-Mail: John.Batorski@Veoliawaterna.com
Date/Time: 11/07/13 10:28 EST

©2009 NetDMR

VEOLIA
WATER

Sent Certified R.R.R. mail #7009 2820 0004 1018 0460 on October 30, 2013

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

October 30, 2013

Re: Aquatic Toxicity Monitoring Report, 4th Quarter 2013

To Whom It May Concern:

Enclosed please find the Naugatuck fourth quarter Aquatic Toxicity Monitoring Report for 2013.

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: PHO/ Naugatuck Test Date: 10/9/13

Sample ID: BF51044

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. If you do not have a facility-specific Part 3, please contact Thom Haze of the CTDEEP at thomas.haze@po.state.ct.us or (860) 424-3734 to obtain one.
- 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 Management, Planning and 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
CONTACT: Ms. Bobbi Aloisa
SAMPLE: Naugatuck WPCF

D.pulex **TEST ID #:** 13-2127a
P.promelas **TEST ID #:** 13-2127b
COC #: c33-4119
PROJECT #: 05.0044745.0(

LABORATORY CONTROL WATER		
NEB Lot #:	A33-S012	SRCF
Hardness:	46	mg/L as $CaCO_3$
Alkalinity:	30	mg/L as $CaCO_3$

SAMPLE COLLECTION INFORMATION	FROM	TO
DATE:	10-7-13	10/8/2013
TIME:	1:34 AM	12:43 AM

INITIAL CHEMISTRY DATA				TECHNICIAN INITIALS:	KS
Color	very light yellow	Temp. (C)	4.6	Hardness (mg/L)	122
Cond. (umhos/cm)	805	D.O.(mg/L)	9.0	Alkalinity (mg/L)	35
Salinity (ppt)	<1	pH (su)	6.6	TRC (mg/L)	<0.02

INVERTEBRATE

Test Set Up Technician Initials: MV
Test Type: Screen
Test Species: *Daphnia pulex*
Source: New England Bioassay
NEB Lot#: Dp13(10-9)
Age: <24 Hours
Test Solution Volume: 30 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 10/9/2013 AT 1502
END DATE: 10/11/2013 AT 1510

VERTEBRATE

Test Set Up Technician Initials: MV
Test Type: Screen
Test Species: *Pimephales promelas*
Source: New England Bioassay
NEB Lot#: Pp13(9-26)
Age: 13 (1-14)Days
Test Solution Volume: 700 ml
Organisms/Test Chamber: 10
Organisms/Concentration: 50
Organisms/Control: 30

START DATE: 10/9/2013 AT 1525
END DATE: 10/11/2013 AT 1431

TEST SET UP CONDUCTIVITIES

D.p Control	175	umhos/cm	*P.p* Control	175	umhos/cm
100%	801	umhos/cm	100%	801	umhos/cm

Technician Initials:							
	D.pulex	0 Hour:	MV	24 Hour:	MG	48 Hour:	PD
	P.promelas	0 Hour:	MV	24 Hour:	MG	48 Hour:	PD

RESULTS OF *Daphnia pulex* Screening Test

Control: 96.7 % 100% 94 %
Replicate A: 100 %
Replicate B: 90 %
Replicate C: 100 %

RESULTS OF *Pimephales promelas* Screening Test

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

COMMENTS:

REVIEWED BY: [signature] DATE: 10/28/13

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): 10-7-13 To 10/8/13

Sample Collection Time: FROM: 1:34 am (AM/PM) TO: 12:43 am (AM/PM)

TOXICITY TEST SUMMARY (PASS/FAIL)

CONTROL SAMPLE RESULTS (% SURVIVAL)

TEST SPECIES	REPLICATE 1	REPLICATE 2	REPLICATE 3
Daphnia pulex	100%	90%	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 DEP.

EFFLUENT SAMPLE RESULTS (MEAN % SURVIVAL)

TEST SPECIES	100% Effluent
Daphnia pulex	94%
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 Batorski Title: Plant Manager

Signature: John Batorski Date: 10/30/13

AQUATIC TOXICITY MONITORING REPORT (ATMR) – PART 2

Facility Name: Borough of Naugatuck WPCF NPDES ID: CT0100641 DSN-001-1

Dilution Water: Soft Reconstituted Fresh Water (SRCF) Hardness: 50 ± 5 mg/L

Sample Collected On: 10/8/13 (date) Received On: 10/9/13 (date)

Test Species: *Daphnia pulex* Source: New England Bioassay Age: < 24 h

Test Duration: 48 hours Beginning: 1502 (am/pm) On: 10/9/13 (date)

Ending: 1510 (am/pm) On: 10/11/13 (date)

Effluent Dilution	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			PH (SU)		
Tech	MV	MG	PD	MV	MG	PD	MV	MG	PD	MV	MG	PD
(%) Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	9	9.0	8.5	8.4	19	20	19	6.8	7.5	7.1
100% B	10	10	10			8.4			19			7.1
100% C	10	10	10			8.3			19			7.1
100% D	10	9	9			8.3			19			7.1
100% E	10	10	9			8.3			19			7.1
CONTROL 1	10	10	10	8.8	8.9	8.7	19	19	19	7.3	7.7	7.4
CONTROL 2	10	10	9			8.7			19			7.3
CONTROL 3	10	10	10			8.7			19			7.3

MEAN SAMPLE SURVIVAL (%)	CONTROL SURVIVAL (%)	#1	#2	#3
[(A+B+C+D+E) /5] X 10 = 94%		100%	90%	100%

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC_{50}
Daphnia pulex	10/16/13	Copper Nitrate Lot #13-0102-019	ACROS/NEB	1.58 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 Title: Laboratory Manager

New England Bioassay

Signature: [illegible] for Kim 10/18 Date: 10/28/13

AQUATIC TOXICITY MONITORING REPORT (ATMR) – PART 2

Facility Name: Borough of Naugatuck WPCF NPDES ID: CT0100641 DSN-001-1
Dilution Water: Soft Reconstituted Fresh Water (SRCF) Hardness: 50 ± 5 mg/L

Sample Collected On: 10/8/13 (date) Received On: 10/9/13 (date)

Test Species: *Pimephales promelas* Source: New England Bioassay Age: 13 days
Test Duration: 48 hours Beginning: 1525 (am/pm) On: 10/9/13 (date)
Ending: 1431 (am/pm) On: 10/11/13 (date)

Effluent Dilution	Number of Organisms Surviving			Dissolved Oxygen (mg/L)			Temperature (°C)			pH (SU)		
Tech	MV	MG	PD	MV	MG	PD	MV	MG	PD	MV	MG	PD
(%) Hour	00	24	48	00	24	48	00	24	48	00	24	48
100% A	10	10	10	9.0	8.7	8.0	19	19	19	6.8	7.4	6.9
100% B	10	10	10		8.7	8.0		19	19		7.3	6.9
100% C	10	10	10		8.7	8.0		19	19		7.3	6.9
100% D	10	10	10		8.6	7.8		19	19		7.3	6.9
100% E	10	10	10		8.7	8.0		19	19		7.3	6.9
CONTROL 1	10	10	10	8.8	8.8	8.1	19	20	19	7.3	7.5	7.0
CONTROL 2	10	10	10		8.6	7.9		20	19		7.6	6.9
CONTROL 3	10	10	10		9.0	8.2		19	19		7.6	7.0

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

REFERENCE TOXICANT RESULTS

SPECIES	DATE	REFERENCE TOXICANT	SOURCE	LC_{50}
Pimephales promelas	10/1/13	Copper Nitrate Lot #13-0102-018	ACROS/NEB	67.998µg/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 Title: Laboratory Manager
New England Bioassay

Signature: [illegible] for Kim Wills Date: 10/28/13

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): FROM: 10-7-13 TO: 10/8/13

Sample Collection Time(s): FROM: 1:34 am (AM/PM) TO: 12:43 am (AM/PM)

Effluent Sample at Arrival

Parameter		Effluent Sample
	Tech Initials	KS
	Date & Time	10/9/13 @ 0815
Temperature (°C)		4.6
pH (standard units)		6.6
Alkalinity (mg/L)		35
Conductivity (µS)		805
Hardness(mg/L)/Salinity(ppt)		122 / <1
Color:		Very 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		MV	MG	MV	MG
Conductivity (µS)		801	821	801	802
Alkalinity (mg/L)		35	35	35	35
Hardness(mg/L) / Salinity(ppt)		122 / <1	118 / <1	122 / <1	114 / <1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

0% Test Sample (Control)

Parameter		*Daphnia pulex*		*Pimephales promelas*	
	Hours	Initial (00)	Final (48)	Initial (00)	Final (48)
Tech Initials		MV	MG	MV	MG
Conductivity (µS)		175	175	175	177
Alkalinity (mg/L)		30	35	30	35
Hardness(mg/L) / Salinity(ppt)		46 / <1	46 / <1	46 / <1	46 / <1
TRC (mg/L)		<0.02	<0.02	<0.02	<0.02

Laboratory Official: Kim Wills Title: Lab Manager
Signature: Kim Wills Date: 10-28-13

Cooler: Yes No
Cooler: PK ICE No
Temp °C Pg of

CHAIN OF CUSTODY RECORD

PHOENIX Environmental Laboratories, Inc.

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

Contact Options:
- [ ] Fax
- [ ] Phone:
- [x] Email:

Customer: NEB
Address: Manchester

Project:
Report to: Bob A
Invoice to:

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: Aqua Oil

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled			Soil VOA Vials (Methanol) (H2O)	GL Soil container (yes)	GL Soil container (yes)	40 ml VOA Vials (HCl)	GL Amber Bottles (Na Is) (H2SO4)	PL Al Is (250ml) (Na Is) (H2SO4)	PL H2SO4 (250ml) (Na Is) (H2SO4)	PL H2SO4 (250ml) (Na Is) (H2SO4)	PL H2SO4 (250ml) (Na Is) (H2SO4)	PL H2SO4 (250ml) (Na Is) (H2SO4)	PL H2SO4 (250ml) (Na Is) (H2SO4)	Leak Test Sheet
C33-4118	BF 50847	WW	10-8-13	7:00	X	Groton	1											
C33-4117	BF 50860	WW	↓	7:00	X	Mystic	1											
C33-4116	BF 50861	WW	↓	8:00	X	Borough	1											
C33-4119	BF 51044	WW	10-8	—	X	Naugatuck	1											

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	10-9-13	0630
[signature]	[signature]	10-9-13	0875

Comments, Special Requirements or Regulations:

Turnaround:
- [ ] 1 Day*
- [ ] 2 Days*
- [ ] 3 Days*
- [ ] Standard
- [ ] Other

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

State where samples were collected:

51044

STATE OF CONNECTICUT ** DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

NPDES Permit:	CT0100641	Exp:	8/7/06	Phone[1]:	(203) 723-1433
Facility:	Naugatuck WPCF	Contact:	James McGrath	Phone[2]:	
Address:	500 Cherry Street	Town:	Naugatuck	Zip:	06770

STATEMENT OF ACKNOWLEDGEMENT

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

Authorized Official: John Batorski Title: Plant Manager

Signature: John Batorski Date: 10-30-13

Sample Date: 10/7/13 Sample Day's Flow: 3.7 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		0.20
Each Test	001 T	mg/L	NITRITE, as N		0.02
Each Test	001 T	mg/L	NITRATE, as N		3.67
Each Test	001 T	mg/L	CYANIDE, Total		<0.01
Each Test	001 T	mg/L	CYANIDE, Amenable		<0.01
Each Test	001 T	mg/L	BERYLLIUM, Total	0.001 mg/L	<0.001
Each Test	001 T	mg/L	ARSENIC, Total	0.005 mg/L	<0.004
Each Test	001 T	mg/L	CADMIUM, Total	0.0005 mg/L	<0.0002
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	0.010
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	<0.002
Each Test	001 T	mg/L	NICKEL, Total		0.015
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	0.069
Each Test	001 T	mg/L	ANTIMONY, Total		<0.005
Each Test	001 T	mg/L	SELENIUM, Total	0.005 mg/L	0.007
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: 10-28-2013

FOR OFFICIAL USE ONLY:

AQUATIC TOXICITY: *Daphnia pulex* — TGA3D

AQUATIC TOXICITY: *Pimephales promelas* — TGA6C

Naugatuck WPCF

Cooler: Yes [ ] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 4 °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

Contact Options:
[ ] Fax:
[ ] Phone:
[ ] Email:

Customer: VEOLIA WATER
Address: 500 CHERRY ST EXT.
Naugatuck, CT 06770

Project: Naugatuck
Report to: Tom Deller
Invoice to: 10-13 ATMR

Project P.O: 10-13 ATMR

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] 10-8-13 Date:

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

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( )oz	GL Soil container ( )oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
51044	EFFLUENT	W/W	10-7-13	24hr										

SEE ATTACHED

Relinquished by:	Accepted by:	Date:	Time:
[signature] T-Deller	[signature]	10/8/13	1000
[signature]		10/8/13	1625

Comments, Special Requirements or Regulations:
10-13 ATMR

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

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

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

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

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

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

State where samples were collected: CT

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 Upon Rec Pg of

Data Delivery:
- [ ] Fax #:
- [ ] Email:

Customer: Veolia Water Naugatuck
Address: 500 Cherry Street
Naugatuck, CT 06770

Project: Acute Toxicity
Report to: Tom Deller
Invoice to: 10-13 ATMR

Project P.O: 10-13 ATMR
Phone #:
Fax #:

Sampler's Signature: [signature] Date: 10/8/13

Client Sample - Information - Identification

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=oil
GW=groundwater SL=sludge A=air X=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Aquatic Toxicity	BOD, TSS, NO2, NO3, Hex Cr	NH3	CN (Total and Amenable)	As, Be, Cd - LDL, Cr, Cu, Pb	Tl, Ni, Ag, Zn, Sb, Se, Hg	Phenols					Cubalainer	Soil VOA Vials [ ] methanol [ ] Sod Bisulfa	GL Soil container ( ) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [X] H2SO4	PL As is [ ] 250ml [ ] 500ml [X] 1000ml	PL H2SO4 [ ] 250ml [X] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle		
	Effluent	WW	10-7-13	24hr	X	X	X	X	X	X	X					1					1	1	1	1	1			

Relinquished by:	Accepted by:	Date:	Time:
[signature] T. Deller	[signature]	10/8/13	1000
[signature]			

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

* SURCHARGE APPLIES

CT/RI
- [ ] RCP Cert
- [ ] GW Protect
- [ ] GA Mobility
- [ ] GB Mobility
- [ ] SW Protection
- [ ] Res. Vol.
- [ ] Ind. Vol.
- [ ] Res. Criteria
- [ ] 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
- [ ] ASP-A
- [ ] NJ Reduced Deliv. *
- [ ] NJ Hazsite EDD
- [ ] Phoenix Std Report
- [ ] Other

State where samples were collected: CT

Comments, Special Requirements or Regulations:
10-13 ATMR

Attachment to SBF51044

P. 37

Environmental

TEST REPORT

RELATIVE ACCUARCY TEST AUDIT (RATA) ON THE CEMS MONITORING THE FLUIDIZED BED INCINERATOR AT THE BOROUGH OF NAUGATUCK POTW NAUGATUCK, CT

OCTOBER 25, 2013

PREPARED FOR:

Veolia Water North America – Northeast LLC
500 Cherry Street
Naugatuck, CT 06770

CONCERNING:

Relative Accuracy Test Audit and Opacity Audit
Veolia Water North America – Northeast LLC
500 Cherry Street
Naugatuck, CT 06770

PREPARED BY:

CK Environmental, Inc.
1020 Turnpike Street
Unit 8
Canton, Massachusetts 02021

CK Project #4328.20

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REPORT REVIEW CERTIFICATION

I, the undersigned, hereby certify that I have reviewed the report, and to the best of my knowledge all given information and/or calculations contained in this report are true, accurate, and complete.

Prepared by: _____
Heidi Fisher, Project Coordinator

Reviewed by: _____
Michael Kelley, QSTI, Project Manager

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

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Appendix B Field Data Sheets

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

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1.0 INTRODUCTION

1.1 Summary of Test Program

CK Environmental, Inc. (CK) was contracted by Veolia Water North America to conduct a Relative Accuracy Test Audit (RATA) on the Continuous Emissions Monitoring System (CEMS) that monitors the emissions from the Fluidized Bed Incinerator (FBI) utilized at the Naugatuck, Connecticut facility. The facility's CEMS are used to monitor the emissions of oxygen and carbon monoxide emitted from the incinerator. The RATA testing was performed on September 17th, 2013. In addition to the RATA, an opacity monitor audit was performed to satisfy the requirements of the third quarter 2013 CTDEEP reporting.

The purpose of this test program was to demonstrate the accuracy of the CEMS and COMS to record and report the emissions of oxygen, carbon monoxide and opacity, and, to ensure that the system meets the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0 and Performance Specifications 1, 3 and 4A.

The following information is detailed in this document:

- Section 2.0 - Description of the facility
- Section 3.0 - Description of the processes tested and a summary of results
- Section 4.0 - Description of the test sampling locations
- Section 5.0 - Describes the test methodology used
- Section 6.0 - Describes quality assurance and quality control procedures
- Appendices – Reduced Field Data, Field Data Sheets, Reference Method CEM Data, Facility Data, Calibration Gas and Opacity Filter Certificates

1.2 Key Personnel

The test program was coordinated by John Batorski, Veolia Water. Michael Kelley of CK was the project manager for this effort and was responsible for all on-site emissions testing activities. He was assisted by Ryan Warren and Richard Gioielli. Contact information for the key personnel of this project can be found in Table 1-1 below.

Table 1-1
Key Personnel

Name	Affiliation	Phone No.
Michael Kelley, Project Manager	CK Environmental, Inc.	781-828-5200
John Batorski	Veolia Water	203-723-1433
Mark Spiro	CTDEEP	

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TEST SUMMARY

Facility Name:	**Veolia Water North America, LLC** 500 Cherry Street Naugatuck, Connecticut
Facility Contact:	**John Batorski, Plant Manager** 203-723-1433 x 2015 john.batorski@veoliawaterna.com
Regulatory Agency: Contact:	**State of Connecticut** **Department of Energy & Environmental Protection** 79 Elm Street Hartford, CT 06106-5127 **Mark Spiro** mark.spiro@ct.gov
Testing Organization:	**CK Environmental, Inc.** 1020 Turnpike Street, Suite 8 Canton, Massachusetts 02021
Project Manager:	**Michael Kelley, QSTI, Project Manager** 781-828-5200 mkelley@ckenvironmental.com
Test Personnel:	Michael Kelley, Ryan Warren, Richard Gioielli
Unit Tested:	Fluidized Bed Incinerator Exhaust Stack
Methods Used:	US EPA Methods 3A, 10, PS-1
Test Date:	September 17, 2013

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2.0 PROCESS DESCRIPTION

2.1 Process Description and Operation

Veolia Water North America Northeast, LLC operates the Borough of Naugatuck POTW which incinerates approximately 80 dry tons of municipal sludge per day and processes nonhazardous industrial waste water. A fluidized bed incinerator (FBI) is used to incinerate sludge generated by the wastewater treatment. The POTW also houses settling tanks, aeration tanks, thickening tanks, holding tanks, and sludge belt filter presses.

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

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

2.2 Continuous Emission Monitoring System

The facility's continuous emissions monitoring system is designed to meet the requirements of 40 CFR, §60.13, §60.150 and 40 CFR, Part 503, Subpart E, §503.40., and 40 CFR, Part 60, Appendix B, PS 3 and 4A. The extractive CEMS transport sample gas from the stack mounted sample probe via heated lines and sample conditioning system to the analyzers for the continuous monitoring of gaseous pollutants. Effluent concentrations of carbon monoxide (CO) and oxygen (O2) are measured by the CEM system. In addition, the system monitors opacity at the outlet stack of the FBI.

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

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The moisture removal systems continuously remove moisture from the sample gas while maintaining minimal contact between the condensate and the sample gas. The Universal Analyzer Model 530 thermoelectric gas sample chillers contain two (2) stainless steel heat exchangers that are continuously drained of condensate by a dual head peristaltic pump. Temperature of the chiller is regulated and set to maintain a temperature of 40 °F.

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

Table 2-1
CEMS Specifications

Parameter	Manufacturer	Model	Serial No.	Range
O2, Dry	Siemens	Oxymat 6E	7MB20211 EAOOOAA 1	0-25%
CO	TECO	48C	480-74304-376	0-300 ppmvd
Opacity	Land	4500 Mark II	0095478	0-100

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

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

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

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3.0 TEST PROGRAM

3.1 Objectives

The purpose of this RATA program was to demonstrate that the accuracy of the CEMS and COMS to monitor and record emission data and to ensure that the system meets the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0. The testing was performed to satisfy the requirements set forth in the facility's Title V permit (Permit No 109-0059-TV).

3.2 Test Matrix

As defined in the Performance Specifications, the comparison of nine to twelve average Reference Method data points to the corresponding average facility CEMS data points allows calculation of instrument and system relative accuracy. CK's transportable continuous emission monitoring system was used to perform the RATA program. The mobile system is equipped with a sample transport and conditioning system and array of gaseous emission monitors that meet the criteria of the Reference Methods (RM). All emission testing was conducted in accordance with the applicable procedures as found in 40 CFR 60, Appendix A and B. Twelve RATA runs were conducted of which nine are used for relative accuracy comparison. Five passes of certified neutral density filters were used to determine the accuracy of the COMS system.

Table 3-1
Test Matrix

Pollutant	Location	Test Method	Allowable Limit	No. of Runs	Run Duration
Oxygen	Outlet of FBI	EPA 3A	1.0% absolute	12	21 min.
Carbon Monoxide		EPA 10	<10% mean value <5% applicable standard	12	21 min.
Opacity		PS-1	3.0% error	Continuous	

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3.3 Deviations from Approved Test Protocol

The CEM probe on the stack was transferred to the facility CEM location after Run 2. System calibrations were completed again prior to the start of Run 3.

3.4 Presentation of Results

The following table summarizes the results of the RATA program performed on the CEMS serving the FBI. The RATA comparisons are reported in units of the applicable standard (O_2 = percent, CO = ppmvd @ 7% O_2). The RATA testing consisted of twelve; twenty-one minute runs of which nine were used for the comparison calculation. The RATA results for oxygen (O_2), and carbon monoxide corrected to 7% oxygen (CO@7% O2). The facility's analyzers meet the RATA criteria.

Table 3-2
Summary of Results
Relative Accuracy Test Audit September 2013

Monitor	Units	RM Mean	CEMS Mean	Relative Accuracy	RA Determination	Bias Adjustment
O2	%	7.03	7.42	0.39	<1% Absolute Difference	N/A
CO	ppm @ 7% O2	10.089	10.289	1.25	<10% mean value	N/A
Opacity	%			<1.1	3.0% error	N/A

Table 2.3 Summary of Results

OPACITY AUDIT CALCULATION SHEET

CLIENT: Veolia Water North America
SOURCE: FBI

DATE: 9/17/13
AUDITOR: CK Environmental

Run #	Zero	Low	Mid	High
1	0.0	7.2	15.0	25.5
2	0.0	7.2	15.3	25.5
3	0.0	7.3	15.3	25.4
4	0.0	7.4	15.3	25.5
5	0.0	7.2	15.3	25.5

	Actual Filter Values		Corrected Filter Values (2)
PATH LENGTH CORRECTION FACTOR (PLCF) =	0.714	-	N/A
LOW CALIBRATION FILTER VALUE =	9.83	-	7.12
MID CALIBRATION FILTER VALUE =	20.23	-	14.90
HIGH CALIBRATION FILTER VALUE =	32.44	-	24.42

N	Low	Value	Delta L	Del L^2
1	7.2	7.1	0.1	0.0
2	7.2	7.1	0.1	0.0
3	7.3	7.1	0.1	0.0
4	7.4	7.1	0.2	0.1
5	7.2	7.1	0.1	0.0
Sum =			0.6	0.1
A = Sum (Delta L) ^ 2 =			0.4	
B = Sum (Delta L ^ 2) =			0.1	
N =			5.0	
(N * B) - A =			0.1	

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

ME = 0.1

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

CI = 0.1

Calibration Error = ABS (ME) + CI

Calibration Error (1) = 0.2

N	Mid	Value	Delta L	Del L^2
1	15.0	14.9	0.1	0.0
2	15.3	14.9	0.4	0.2
3	15.3	14.9	0.4	0.1
4	15.3	14.9	0.3	0.1
5	15.3	14.9	0.4	0.1
Sum =			1.6	0.6
A = Sum (Delta L) ^ 2 =			2.5	
B = Sum (Delta L ^ 2) =			0.6	
N =			5.0	
(N * B) - A =			0.5	

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

ME = 0.3

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

CI = 0.2

Calibration Error = ABS (ME) + CI

Calibration Error(1) = 0.5

N	High	Value	Delta L	Del L^2
1	25.5	24.4	1.0	1.1
2	25.5	24.4	1.1	1.1
3	25.4	24.4	1.0	1.0
4	25.5	24.4	1.1	1.2
5	25.5	24.4	1.0	1.1
Sum =			5.3	5.5
A = Sum (Delta L) ^ 2 =			27.7	
B = Sum (Delta L ^ 2) =			5.5	
N =			5.0	
(N * B) - A =			0.0	

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

ME = 1.1

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

CI = 0.0

Calibration Error = ABS (ME) + CI

Calibration Error (1) = 1.1

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

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 09/01/13 to 09/30/13	**DMR Due Date:**	10/15/13	**Status:**	NotDMR Validated

Considerations for Form Completion

MONTHLY AVERAGE CONCENTRATIONS SHALL NOT BE EXCEEDED BY > 1.5 DURING ANY WEEK.GRAB SAMPLES SHALL BE TAKEN DURINGPERIODS OF DAILY PEAK FLOW.SAMPLES COLLECTED FOR BACTERIOLOGICAL EXAM SHALL BE COLLECTED BTW 11AM & 3PM OR DURING PEAK HORLY FLOW.

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	1 - Effluent Gross	0	–	Sample										=	88	15 - deg F		01/01 - Daily	GR - GRAB
					Permit Req.											Req Mon INST MAX	15 - deg F		01/01 - Daily	GR - GRAB
					Value NODI															
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	–	Sample						=	5.9					19 - mg/L		01/01 - Daily	GR - GRAB
					Permit Req.						>=	5.0001 INST MIN					19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI															
00400	pH	1 - Effluent Gross	0	–	Sample						=	6.7			=	7.1	12 - SU		01/01 - Daily	GR - GRAB
					Permit Req.						>=	6 INST MIN			<=	9 INST MAX	12 - SU		01/01 - Daily	GR - GRAB
					Value NODI															
00410	Alkalinity, total [as CaCO3]	1 - Effluent Gross	0	–	Sample										=	60	19 - mg/L		01/30 - Monthly	GR - GRAB
					Permit Req.											Req Mon INST MAX	19 - mg/L		01/30 - Monthly	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	–	Sample								=	5	=	5	19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS
					Permit Req.								<=	30 MO AVG	<=	45 DAILY MX	19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS
					Value NODI															
00530	Solids, total suspended	G - Raw Sewage Influent	0	–	Sample								=	318			19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS
					Permit Req.									Req Mon MO AVG			19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS
					Value NODI															
00545	Solids, settleable	1 - Effluent Gross	0	–	Sample										<	0.01	25 - mL/L		01/07 - Weekly	GR - GRAB
					Permit Req.											Req Mon INST MAX	25 - mL/L		01/07 - Weekly	GR - GRAB
					Value NODI															
00600	Nitrogen, total	1 - Effluent Gross	0	–	Sample										=	7.1	19 - mg/L		01/30 - Monthly	CP - COMPOS
					Permit Req.											Req Mon DAILY MX	19 - mg/L		01/30 - Monthly	CP - COMPOS
					Value NODI															
00600	Nitrogen, total	C - Nitrogen, Removal Complete	0	–	Sample	=	181			26 - lb/d									02/07 - Twice Every Week	CP - COMPOS
					Permit Req.		Req Mon MO AVG			26 - lb/d									02/07 - Twice Every Week	CP - COMPOS
					Value NODI															
					Sample								=	0.3	=	0.5	19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS

Sent electronically 10-22-13 (due to gov't shutdown)

00610 Nitrogen, ammonia total [as N]	1 - Effluent Gross	3	--	Permit Req.							<=	4 MO AVG		Req Mon DAILY MX	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Value NODI													
				Sample									=	0.04	19 - mg/L	01/30 - Monthly	CP - COMPOS
00615 Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample									=	4.1	19 - mg/L	01/30 - Monthly	CP - COMPOS
00620 Nitrogen, nitrate total [as N]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample									=	2.9	19 - mg/L	01/30 - Monthly	CP - COMPOS
00625 Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample									=	11.2	19 - mg/L	01/30 - Monthly	CP - COMPOS
00665 Phosphorus, total [as P]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample									=	3	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
01002 Arsenic, total [as As]	S - See Comments	0	--	Permit Req.										Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									<	0.45	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
01012 Beryllium, total [as Be]	S - See Comments	0	--	Permit Req.										Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI													
				Sample									<	0.001	19 - mg/L	01/30 - Monthly	CP - COMPOS
01027 Cadmium, total [as Cd]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample	=	0.13	=	0.18	01 - kg/d							01/07 - Weekly	CP - COMPOS
01042 Copper, total [as Cu]	1 - Effluent Gross	0	--	Permit Req.	<=	1.4 MO AVG	<=	2.08 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample									<	0.001	19 - mg/L	01/30 - Monthly	CP - COMPOS
01077 Silver, total [as Ag]	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample	=	0.97	=	1.14	01 - kg/d							01/07 - Weekly	CP - COMPOS
01092 Zinc, total [as Zn]	1 - Effluent Gross	0	--	Permit Req.	<=	4.65 MO AVG	<=	11.11 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
				Value NODI													
				Sample	=	3.8			03 - MGD							99/99 - Continuous	TM - TOTALZ
50050 Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Permit Req.	<=	10.3 MO AVG			03 - MGD							99/99 - Continuous	TM - TOTALZ
				Value NODI													
				Sample									=	0.04	19 - mg/L	04/01 - Four Per Day	GR - GRAB
50060 Chlorine, total residual	1 - Effluent Gross	0	--	Permit Req.									<=	.05 DAILY MX	19 - mg/L	04/01 - Four Per Day	GR - GRAB
				Value NODI													
				Sample									=	11.5	19 - mg/L	01/30 - Monthly	CP - COMPOS
70507 Phosphorous, in total orthophosphate	1 - Effluent Gross	0	--	Permit Req.										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI													
				Sample							=	30	=	50	13 - #/100mL	12/30 - Twelve Per Month	GR - GRAB
				Permit													

74055 Coliform, fecal general	1 - Effluent Gross	0	–	Req.				<=	200 30DA GEO	<=	400 7 DA GEO	13 - #/100mL	12/30 - Twelve Per Month	GR - GRAB
				Value										
				NODI										
				Sample						=	893	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78467 Zinc, dry weight	S - See Comments	0	–	Value										
				NODI										
				Sample						=	59.5	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78468 Lead, dry weight	S - See Comments	0	–	Value										
				NODI										
				Sample						=	24.1	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78469 Nickel, dry weight	S - See Comments	0	–	Value										
				NODI										
				Sample						=	1.12	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78471 Mercury, dry weight	S - See Comments	0	–	Value										
				NODI										
				Sample						=	39.7	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78473 Chromium, dry weight	S - See Comments	0	–	Value										
				NODI										
				Sample						=	714	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78475 Copper, sludge, tot, dry weight [as Cu]	S - See Comments	0	–	Value										
				NODI										
				Sample						=	1.94	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.							Opt Mon INST MAX	69 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
78476 Cadmium, sludge, tot dry weight [as Cd]	S - See Comments	0	–	Value										
				NODI										
				Sample				=	5	=	11	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Permit Req.				<=	30 MO AVG	<=	40 DAILY MX	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
80126 BOD, carbonaceous, 5 day, 5 C	1 - Effluent Gross	1	–	Value										
				NODI										
				Sample				=	101			19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Permit Req.					Req Mon MO AVG			19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
80126 BOD, carbonaceous, 5 day, 5 C	Q - Raw Sewage Influent	0	–	Value										
				NODI										
				Sample	=	98						23 - %	01/30 - Monthly	CA - CALCTD
				Permit Req.	>=	85 MN % RMV						23 - %	01/30 - Monthly	CA - CALCTD
81011 Solids, suspended percent removal	K - Percent Removal	0	–	Value										
				NODI										
				Sample	=	97						23 - %	01/30 - Monthly	CA - CALCTD
				Permit Req.	>=	85 MN % RMV						23 - %	01/30 - Monthly	CA - CALCTD
81383 Carbonaceous oxygen demand, % removal	K - Percent Removal	0	–	Value										
				NODI										
				Sample					Opt Mon AVERAGE			9A - pass=0/fail=1	01/90 - Quarterly	CP - COMPOS
				Permit Req.					9 - Conditional Monitoring - Not Required This Period					
TGA3D Pass/Fail Static 48Hr Acute D. Pulex	T - See Comments	1	–	Value										
				NODI										
				Sample					Opt Mon AVERAGE			9A - pass=0/fail=1	01/90 - Quarterly	CP - COMPOS
				Permit Req.					9 - Conditional Monitoring - Not Required This Period					
TGA6C Pass/Fail Static 48Hr Acute Pimephales	T - See Comments	1	–	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.

VEOLIA
WATER

Sent via Certified R.R.R. Mail 7009 2820 0004 1018 0446 on October 17, 2013

October 17, 2013

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, July 1, 2013 to September 30, 2013.

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

Part 1: FACILITY INFORMATION

Corporation Name	Borough of Naugatuck		
Premises Name	Borough of Naugatuck POTW		
Corporation Address	229 Church Street, Naugatuck, CT 06770		
Premises Address	500 Cherry Street, Naugatuck, CT 06770		
Premises Contact Person	John Batorski		
Contact Phone/FAX/e-mail	(203) 723-1433	(203) 723-8539	
Reporting Period Dates	From: July 1, 2013	To: September 30, 2013	
Were there any monitoring system failures during this reporting period? (Yes/ No - provide details in report).	YES	Attachments: COMS data (CD or diskette); COMS data (e-mailed); ☐ Copy of quarterly QA audits; ☐ Excepted activities records (if requested).	
Are any excess emissions being reported during this reporting period? (Yes/No - provide details in report).	NO		

Part 2: CERTIFICATION

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

Preparer : CK Environmental

Date: October 17, 2013

Plant Signature: John Batorski, 10-17-13

Print (or type) John Batorski

Name and Title: Plant Manager

PART 3: PERFORMANCE REPORT			
Facility Name:	Borough of Naugatuck POTW		
Combustion Unit(s) Descriptions	Fluidized Bed Incinerator		
UNIT AND MONITOR INFORMATION			
Unit Number or ID	EMU 52		
Unit Operating Hours	2058.38 hours		
Sampling Location	Fluidized Bed Incinerator Emissions Stack		
Manufacturer / Model No.	Land / 4500 Mark II	Serial No.	0095478
Date of Certification	January 12, 2005	Date of last QA audit	September 25, 2013
MONITOR DATA AVAILABILITY			
Monitoring equipment malfunctions	.02 Hours		
Non-monitoring equipment malfunctions	0		
Calibrations	5.72 Hours		
Other known causes[1]	31.26 Hours		
Unknown causes	None		
Total COM downtime	37 Hours		
Data Availability (calculated)	98.20%		

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

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

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

PART 4: SECTION 4 COMS EMISSION SUMMARY REPORT

Facility Name:	Borough of Naugatuck POTW

UNIT INFORMATION

Unit Number or ID	EMU 52	Unit Operating Hours (a)	2058.38

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

OPACITY EXCESS EMISSIONS SUMMARY

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

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

INVALID DATA INCIDENTS REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/10/2013 @ 06:20
PERIOD: 07/01/2013 - 09/30/2013

INCIDENT: INVALID OPACITY

DATE	START TIME	END TIME	#MIN LONG	CODE	EXPLANATION	CORRECTIVE ACTION
07/01/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/01/13	08:07	09:21	0075	13	PROCESS DOWN	N/A
07/02/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/03/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/04/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/05/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/06/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/07/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/07/13	16:19	16:38	0020	13	PROCESS DOWN	N/A
07/07/13	17:43	18:02	0020	13	PROCESS DOWN	N/A
07/08/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/09/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/09/13	07:43	12:51	0309	13	PROCESS DOWN	N/A
07/10/13	05:55	05:57	0003	14	RECALIBRATION	ROUTINE MAINTENANCE PERFORMED ON DA
07/11/13	03:45	03:48	0004	18	DATA HANDLING SYSTEM MALFUNCTION	N/A
07/11/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/12/13	05:55	05:57	0003	14	RECALIBRATION	ROUTINE MAINTENANCE PERFORMED ON CE
07/12/13	06:57	08:18	0082	20	CORRECTIVE MAINTENANCE	N/A
07/12/13	08:19	08:26	0008	14	RECALIBRATION	N/A
07/13/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/14/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/15/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/16/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/17/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/18/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/19/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/20/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/21/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/22/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/23/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/24/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/25/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/26/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/27/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/27/13	07:22	07:36	0015	13	PROCESS DOWN	N/A
07/27/13	08:07	08:21	0015	13	PROCESS DOWN	N/A
07/28/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/29/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/29/13	12:52	13:36	0045	13	PROCESS DOWN	N/A
07/30/13	05:55	05:57	0003	14	RECALIBRATION	N/A
07/31/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/01/13	05:55	05:57	0003	14	RECALIBRATION	ROUTINE MAINTENANCE PERFORMED ON DA
08/01/13	06:07	06:35	0029	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/01/13	07:06	08:24	0079	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/01/13	14:00	14:04	0005	18	DATA HANDLING SYSTEM MALFUNCTION	N/A
08/02/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/03/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/04/13	01:52	02:36	0045	13	PROCESS DOWN	N/A
08/04/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/04/13	07:37	10:51	0195	13	PROCESS DOWN	N/A
08/05/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/06/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/06/13	06:22	16:06	0585	13	PROCESS DOWN	N/A
08/07/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/08/13	05:55	05:57	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/08/13	05:58	07:01	0064	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/08/13	07:02	07:05	0004	14	RECALIBRATION	N/A
08/08/13	10:52	11:06	0015	13	PROCESS DOWN	N/A
08/08/13	17:07	17:21	0015	13	PROCESS DOWN	N/A
08/09/13	05:55	05:57	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	05:58	06:10	0013	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/09/13	06:11	06:13	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	06:14	06:28	0015	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/09/13	06:29	06:31	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	06:32	06:36	0005	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/09/13	06:37	06:39	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	06:40	06:43	0004	11	EXCESS DRIFT PRIMARY MONITOR	ROUTINE MAINTENANCE PERFORMED ON CE
08/09/13	06:44	08:32	0109	20	CORRECTIVE MAINTENANCE	N/A
08/09/13	08:33	08:35	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	08:36	08:38	0003	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/09/13	08:39	08:41	0003	14	RECALIBRATION	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	08:42	09:50	0069	11	EXCESS DRIFT PRIMARY MONITOR	N/A
08/09/13	09:51	09:54	0004	14	RECALIBRATION	

INVALID DATA INCIDENTS REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/10/2013 @ 06:20
PERIOD: 07/01/2013 - 09/30/2013

INCIDENT: INVALID OPACITY

DATE	START TIME	END TIME	#MIN LONG	CODE	EXPLANATION	CORRECTIVE ACTION
08/09/13	09:55	12:01	0127	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/09/13	12:02	12:04	0003	14	RECALIBRATION	N/A
08/10/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/10/13	11:22	16:51	0330	13	PROCESS DOWN	N/A
08/10/13	18:07	18:36	0030	13	PROCESS DOWN	N/A
08/11/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/12/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/12/13	08:52	17:06	0495	13	PROCESS DOWN	N/A
08/13/13	04:37	09:06	0270	13	PROCESS DOWN	N/A
08/14/13	03:29	03:31	0003	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/14/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/14/13	05:58	06:47	0050	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	06:48	06:50	0003	14	RECALIBRATION	N/A
08/14/13	06:51	08:43	0113	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	08:44	08:46	0003	14	RECALIBRATION	N/A
08/14/13	08:47	09:10	0024	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	09:11	09:13	0003	14	RECALIBRATION	N/A
08/14/13	09:14	11:11	0118	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	11:12	11:14	0003	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
08/14/13	11:15	13:36	0142	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	13:38	13:41	0004	14	RECALIBRATION	N/A
08/14/13	13:42	14:10	0029	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	14:11	14:13	0003	14	RECALIBRATION	N/A
08/14/13	14:14	18:48	0275	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	18:49	18:51	0003	14	RECALIBRATION	N/A
08/14/13	18:52	19:23	0032	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	19:24	19:27	0004	14	RECALIBRATION	N/A
08/14/13	19:28	21:51	0144	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/14/13	21:52	23:59	0128	13	PROCESS DOWN	N/A
08/15/13	00:00	06:44	0405	13	PROCESS DOWN	N/A
08/15/13	06:45	07:01	0017	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/15/13	07:02	07:28	0027	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	07:29	07:29	0001	16	PRIMARY MONITOR MALFUNCTION	CORRECTIVE MAINTENANCE PERFORMED ON
08/15/13	07:30	07:35	0006	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	07:36	07:36	0001	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
08/15/13	07:37	07:38	0002	14	RECALIBRATION	N/A
08/15/13	07:39	07:52	0014	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	07:53	07:55	0003	14	RECALIBRATION	N/A
08/15/13	07:56	08:32	0037	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	08:33	08:35	0003	14	RECALIBRATION	N/A
08/15/13	08:36	08:46	0011	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	08:47	08:49	0003	14	RECALIBRATION	N/A
08/15/13	08:50	09:12	0023	11	EXCESS DRIFT PRIMARY MONITOR	MANUALLY RECALIBRATE PRIMARY MONITO
08/15/13	09:13	09:15	0003	14	RECALIBRATION	N/A
08/16/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/17/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/17/13	10:07	11:21	0075	13	PROCESS DOWN	N/A
08/18/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/19/13	05:07	15:21	0615	13	PROCESS DOWN	N/A
08/20/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/20/13	11:37	13:06	0090	13	PROCESS DOWN	N/A
08/20/13	13:22	13:51	0030	13	PROCESS DOWN	N/A
08/21/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/22/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/22/13	06:52	07:51	0060	13	PROCESS DOWN	N/A
08/23/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/24/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/24/13	13:07	18:51	0345	13	PROCESS DOWN	N/A
08/25/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/26/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/27/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/28/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/28/13	07:32	08:03	0032	13	PROCESS DOWN	N/A
08/29/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/30/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/30/13	07:53	13:09	0317	13	PROCESS DOWN	N/A
08/31/13	05:55	05:57	0003	14	RECALIBRATION	N/A
08/31/13	13:10	13:45	0036	13	PROCESS DOWN	N/A
09/01/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/01/13	07:42	08:01	0020	13	PROCESS DOWN	N/A
09/02/13	03:50	23:59	1210	13	PROCESS DOWN	N/A
09/03/13	00:00	11:35	0696	13	PROCESS DOWN	N/A
09/04/13	05:55	05:57	0003	14	RECALIBRATION	N/A

INVALID DATA INCIDENTS REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/10/2013 @ 06:20
PERIOD: 07/01/2013 - 09/30/2013

INCIDENT: INVALID OPACITY

DATE	START TIME	END TIME	#MIN LONG	CODE	EXPLANATION	CORRECTIVE ACTION
09/05/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/05/13	06:36	06:39	0004	13	PROCESS DOWN	N/A
09/05/13	09:10	09:18	0009	13	PROCESS DOWN	N/A
09/05/13	09:19	10:02	0044	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/05/13	10:03	11:09	0067	13	PROCESS DOWN	N/A
09/05/13	11:17	11:19	0003	14	RECALIBRATION	N/A
09/05/13	12:55	22:54	0600	13	PROCESS DOWN	N/A
09/06/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/06/13	06:10	06:24	0015	13	PROCESS DOWN	N/A
09/07/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/08/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/09/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/09/13	08:49	09:17	0029	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/09/13	10:40	23:59	0800	13	PROCESS DOWN	N/A
09/10/13	00:00	00:20	0021	13	PROCESS DOWN	N/A
09/10/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/11/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/11/13	11:36	11:50	0015	13	PROCESS DOWN	N/A
09/12/13	03:39	03:41	0003	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/12/13	03:42	03:42	0001	18	DATA HANDLING SYSTEM MALFUNCTION	ROUTINE MAINTENANCE PERFORMED ON DA
09/12/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/13/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/13/13	09:36	12:50	0195	13	PROCESS DOWN	N/A
09/14/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/15/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/16/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/16/13	06:51	16:30	0580	13	PROCESS DOWN	N/A
09/16/13	16:31	18:27	0117	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/16/13	18:28	18:35	0008	14	RECALIBRATION	N/A
09/17/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/18/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/19/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/19/13	08:17	08:44	0028	13	PROCESS DOWN	N/A
09/19/13	19:09	19:28	0020	13	PROCESS DOWN	N/A
09/20/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/20/13	07:28	07:31	0004	20	CORRECTIVE MAINTENANCE	ROUTINE MAINTENANCE PERFORMED ON CE
09/20/13	10:29	10:32	0004	13	PROCESS DOWN	N/A
09/20/13	10:37	10:44	0008	13	PROCESS DOWN	N/A
09/21/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/22/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/22/13	19:45	19:52	0008	13	PROCESS DOWN	N/A
09/23/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/23/13	10:53	11:37	0045	13	PROCESS DOWN	N/A
09/24/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/25/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/26/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/27/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/28/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/28/13	10:57	11:16	0020	13	PROCESS DOWN	N/A
09/29/13	05:55	05:57	0003	14	RECALIBRATION	N/A
09/30/13	05:55	05:57	0003	14	RECALIBRATION	N/A

INCIDENT SUMMARY: INVALID OPACITY

CODE#	HOURS	PERCENT	EXPLANATION
11	22.42	12.01	EXCESS DRIFT PRIMARY MONITOR
13	149.62	80.18	PROCESS DOWN
14	5.72	3.06	RECALIBRATION
16	0.02	0.01	PRIMARY MONITOR MALFUNCTION
18	2.12	1.13	DATA HANDLING SYSTEM MALFUNCTION
20	6.72	3.60	CORRECTIVE MAINTENANCE

TOTAL HOURS: 186.60

92 days Q3 2013 = 2208
− 149.62
2058.38

$\frac{2058.38 - 37}{2058.38} \times 100 = 98.20\%$

AVAILABILITY REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/09/2013 @ 10:39
PERIOD: 07/01/2013 - 09/30/2013

DATA AVAILABILITY AND VALIDITY

DATE MM/DD/YY	CO @7% (ppmvd) VALID HOURS	%	SOURCE ON-LINE HOURS	%	DAS ON-LINE HOURS	%
07/01/13	20.75	91.2%	22.75	94.8%	24.00	100.0%
07/02/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/03/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/04/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/05/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/06/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/07/13	23.33	100.0%	23.33	97.2%	24.00	100.0%
07/08/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/09/13	18.85	100.0%	18.85	78.5%	24.00	100.0%
07/10/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/11/13	24.00	100.0%	24.00	100.0%	23.93	99.7%
07/12/13	22.00	91.7%	24.00	100.0%	24.00	100.0%
07/13/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/14/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/15/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/16/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/17/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/18/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/19/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/20/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/21/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/22/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/23/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/24/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/25/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/26/13	22.00	91.7%	24.00	100.0%	24.00	100.0%
07/27/13	23.50	100.0%	23.50	97.9%	24.00	100.0%
07/28/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/29/13	23.25	100.0%	23.25	96.9%	24.00	100.0%
07/30/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/31/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/01/13	21.00	92.8%	22.63	94.3%	22.15	92.3%
08/02/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/03/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/04/13	20.00	100.0%	20.00	83.3%	24.00	100.0%
08/05/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/06/13	14.25	100.0%	14.25	59.4%	24.00	100.0%
08/07/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/08/13	23.50	100.0%	23.50	97.9%	24.00	100.0%
08/09/13	22.00	91.7%	24.00	100.0%	24.00	100.0%
08/10/13	18.00	100.0%	18.00	75.0%	24.00	100.0%
08/11/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/12/13	15.75	100.0%	15.75	65.6%	24.00	100.0%
08/13/13	19.50	100.0%	19.50	81.3%	24.00	100.0%
08/14/13	21.85	100.0%	21.85	91.0%	23.95	99.8%
08/15/13	17.13	100.0%	17.13	71.4%	24.00	100.0%
08/16/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/17/13	22.75	100.0%	22.75	94.8%	24.00	100.0%
08/18/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/19/13	13.75	100.0%	13.75	57.3%	24.00	100.0%
08/20/13	22.00	100.0%	22.00	91.7%	24.00	100.0%
08/21/13	24.00	100.0%	24.00	100.0%	24.00	100.0%

AVAILABILITY REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/09/2013 @ 10:39
PERIOD: 07/01/2013 - 09/30/2013

DATA AVAILABILITY AND VALIDITY

DATE MM/DD/YY	CO @7% (ppmvd) VALID HOURS	%	SOURCE ON-LINE HOURS	%	DAS ON-LINE HOURS	%
08/22/13	23.00	100.0%	23.00	95.8%	24.00	100.0%
08/23/13	22.00	91.7%	24.00	100.0%	24.00	100.0%
08/24/13	18.25	100.0%	18.25	76.0%	24.00	100.0%
08/25/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/26/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/27/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/28/13	23.47	100.0%	23.47	97.8%	24.00	100.0%
08/29/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/30/13	18.72	100.0%	18.72	78.0%	24.00	100.0%
08/31/13	23.40	100.0%	23.40	97.5%	24.00	100.0%
09/01/13	23.67	100.0%	23.67	98.6%	24.00	100.0%
09/02/13	3.83	100.0%	3.83	16.0%	24.00	100.0%
09/03/13	12.40	100.0%	12.40	51.7%	24.00	100.0%
09/04/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/05/13	11.93	100.0%	11.93	49.7%	24.00	100.0%
09/06/13	23.75	100.0%	23.75	99.0%	24.00	100.0%
09/07/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/08/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/09/13	8.67	81.3%	10.67	44.4%	24.00	100.0%
09/10/13	23.65	100.0%	23.65	98.5%	24.00	100.0%
09/11/13	23.75	100.0%	23.75	99.0%	24.00	100.0%
09/12/13	24.00	100.0%	24.00	100.0%	23.95	99.8%
09/13/13	20.75	100.0%	20.75	86.5%	24.00	100.0%
09/14/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/15/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/16/13	13.97	100.0%	13.97	58.2%	24.00	100.0%
09/17/13	23.98	100.0%	23.98	99.9%	24.00	100.0%
09/18/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/19/13	23.20	100.0%	23.20	96.7%	24.00	100.0%
09/20/13	21.80	91.6%	23.80	99.2%	24.00	100.0%
09/21/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/22/13	23.87	100.0%	23.87	99.4%	24.00	100.0%
09/23/13	23.25	100.0%	23.25	96.9%	24.00	100.0%
09/24/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/25/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/26/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/27/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/28/13	23.67	100.0%	23.67	98.6%	24.00	100.0%
09/29/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
09/30/13	24.00	100.0%	24.00	100.0%	24.00	100.0%

AVAILABILITY REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/09/2013 @ 10:39
PERIOD: 07/01/2013 - 09/30/2013

DATA AVAILABILITY AND VALIDITY

DATE MM/DD/YY	CO @7% (ppmvd) VALID HOURS	%	SOURCE ON-LINE HOURS	%	DAS ON-LINE HOURS	%
TOTAL:	2040.13	99.2%	2055.77	93.1%	2205.98	99.9%

AVAILABILITY REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/09/2013 @ 10:39
PERIOD: 07/01/2013 - 09/30/2013

DATA AVAILABILITY AND VALIDITY

DATE MM/DD/YY	OPACITY (%) VALID HOURS	%	SOURCE ON-LINE HOURS	%	DAS ON-LINE HOURS	%
07/01/13	22.75	100.0%	22.75	94.8%	24.00	100.0%
07/02/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/03/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/04/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/05/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/06/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/07/13	23.33	100.0%	23.33	97.2%	24.00	100.0%
07/08/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/09/13	18.85	100.0%	18.85	78.5%	24.00	100.0%
07/10/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/11/13	24.00	100.0%	24.00	100.0%	23.93	99.7%
07/12/13	22.00	91.7%	24.00	100.0%	24.00	100.0%
07/13/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/14/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/15/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/16/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/17/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/18/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/19/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/20/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/21/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/22/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/23/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/24/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/25/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/26/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/27/13	23.50	100.0%	23.50	97.9%	24.00	100.0%
07/28/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/29/13	23.25	100.0%	23.25	96.9%	24.00	100.0%
07/30/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
07/31/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/01/13	22.63	100.0%	22.63	94.3%	22.15	92.3%
08/02/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/03/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/04/13	20.00	100.0%	20.00	83.3%	24.00	100.0%
08/05/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/06/13	14.25	100.0%	14.25	59.4%	24.00	100.0%
08/07/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/08/13	22.50	95.7%	23.50	97.9%	24.00	100.0%
08/09/13	18.00	75.0%	24.00	100.0%	24.00	100.0%
08/10/13	18.00	100.0%	18.00	75.0%	24.00	100.0%
08/11/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/12/13	15.75	100.0%	15.75	65.6%	24.00	100.0%
08/13/13	19.50	100.0%	19.50	81.3%	24.00	100.0%
08/14/13	6.00	27.5%	21.85	91.0%	23.95	99.8%
08/15/13	14.13	82.5%	17.13	71.4%	24.00	100.0%
08/16/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/17/13	22.75	100.0%	22.75	94.8%	24.00	100.0%
08/18/13	24.00	100.0%	24.00	100.0%	24.00	100.0%
08/19/13	13.75	100.0%	13.75	57.3%	24.00	100.0%
08/20/13	22.00	100.0%	22.00	91.7%	24.00	100.0%
08/21/13	24.00	100.0%	24.00	100.0%	24.00	100.0%

AVAILABILITY REPORT

COMPANY NAME: VEOLIA WATER NORTH AMERICA
LOCATION: Naugatuck, CT
SOURCE: FB Incinerator
CEMS ID NO: 1234
DATE CREATED: 10/09/2013 @ 10:39
PERIOD: 07/01/2013 - 09/30/2013

DATA AVAILABILITY AND VALIDITY

DATE MM/DD/YY	OPACITY (%) VALID HOURS	%	SOURCE ON-LINE HOURS	%	DAS ON-LINE HOURS	%
TOTAL:	2024.75	98.5%	2055.77	93.1%	2205.98	99.9%

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	07/11	03:45	07/11	03:48	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/01	06:07	08/01	06:35	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/01	07:06	08/01	08:24	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/01	14:00	08/01	14:04	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/08	5:58	08/08	07:01	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued Training
52	III.E.21	08/09	5:58	08/09	06:10	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued Training
52	III.E.21	08/09	06:14	08/09	06:28	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued Training
52	III.E.21	08/09	06:32	08/09	06:36	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued Training
52	III.E.21	08/09	06:40	08/09	06:43	Excess Drift Primary Monitor	Technician called in for recalibration	Plant personnel trying to pinpoint problem
52	III.E.21	08/09	08:36	08/09	08:38	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search
52	III.E.21	08/09	08:42	08/09	09:50	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search
52	III.E.21	08/09	09:55	08/09	12:01	Excess Drift Primary Monitor	Technician in for recalibration	Equipment malfunction repaired
52	III.E.21	08/14	03:29	08/14	03:31	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/14	05:58	08/14	06:47	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued Training
52	III.E.21	08/14	06:51	08/14	08:43	Excess Drift Primary Monitor	Technician called in for recalibration	Plant personnel trying to pinpoint problem
52	III.E.21	08/14	08:47	08/14	09:10	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search
52	III.E.21	08/14	09:14	08/14	11:11	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search
52	III.E.21	08/14	11:12	08/14	11:14	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	08/14	11:15	08/14	13:36	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search/repairs
52	III.E.21	08/14	13:42	08/14	14:10	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search/repairs
52	III.E.21	08/14	14:14	08/14	18:48	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search/repairs
52	III.E.21	08/14	18:52	08/14	19:23	Excess Drift Primary Monitor	Plant personnel recalibrated unit	Continued diagnostic search/repairs
52	III.E.21	08/14	19:28	08/14	21:51	Excess Drift Primary Monitor	Technician called in for recalibration	Process shut down until technician arrives

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	08/15	07:02	08/15	07:28	Excess Drift Primary Monitor	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	07:29	08/15	07:29	Primary Monitor Malfunction	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	07:30	08/15	07:35	Excess Drift Primary Monitor	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	07:39	08/15	07:52	Excess Drift Primary Monitor	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	07:56	08/15	08:32	Excess Drift Primary Monitor	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	08:36	08/15	08:46	Excess Drift Primary Monitor	Technician in for recalibration	Technician performing diagnostic testing
52	III.E.21	08/15	08:50	08/15	09/12	Excess Drift Primary Monitor	Technician in for recalibration	Circuit board replaced
52	III.E.21	09/12	03:39	09/12	03:41	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost
52	III.E.21	09/12	03:42	09/12	03:42	Data Handling System Malfunction	Routine maintenance performed on DAS	PLC has seven day backup capabilities so no information is lost

Part 6: List of Exc[illegible] 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			

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TEST REPORT

EMISSION COMPLIANCE TEST PROGRAM

VEOLIA WATER NORTH AMERICA, INC.

NOVEMBER 4, 2013

PREPARED FOR: Veolia Water North America – Northeast LLC
500 Cherry Street
Naugatuck, CT 06770

CONCERNING: Fluidized Bed Incinerator Emission Compliance Testing
Veolia Water North America – Northeast LLC
500 Cherry Street
Naugatuck, CT 06770

PREPARED BY: CK Environmental, Inc.
1020 Turnpike Street, Suite 8
Canton, MA 02021

CK Project No. 4328.20

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

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TEST SUMMARY

Facility Name:	**Veolia Water North America, LLC** 500 Cherry Street Naugatuck, Connecticut
Facility Contact:	**John Batorski, Plant Manager** 203-723-1433 x 2015 john.batorski@veoliawaterna.com
Regulatory Agency: Contact:	**State of Connecticut** **Department of Energy & Environmental Protection** 79 Elm Street Hartford, CT 06106-5127 **Mark Spiro** mark.spiro@ct.gov
Testing Organization:	**CK Environmental, Inc.** 1020 Turnpike Street, Suite 8 Canton, Massachusetts 02021
Project Manager:	**Michael Kelley, QSTI, Project Manager** 781-828-5200 mkelley@ckenvironmental.com
Test Personnel:	Michael Kelley, Ryan Warren, Richard Gioielli
Unit Tested:	Fluidized Bed Incinerator Exhaust Stack
Methods Used:	US EPA Methods 18/25A, 29
Test Date:	September 17, 2013

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2.0 FACILITY DESCRIPTION

2.1 Process Description

Veolia Water North America Northeast, LLC operates the Borough of Naugatuck POTW which incinerates approximately 80 dry tons of municipal sludge per day and processes nonhazardous industrial waste water. A fluidized bed incinerator (FBI) is used to incinerate sludge. The POTW also houses settling tanks; aeration tanks, thickening tanks, holding tanks, and sludge belt filter presses.

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

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

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3.2 Problems and Changes

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

3.3 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. **Table 3-2** provides individual test run results and data.

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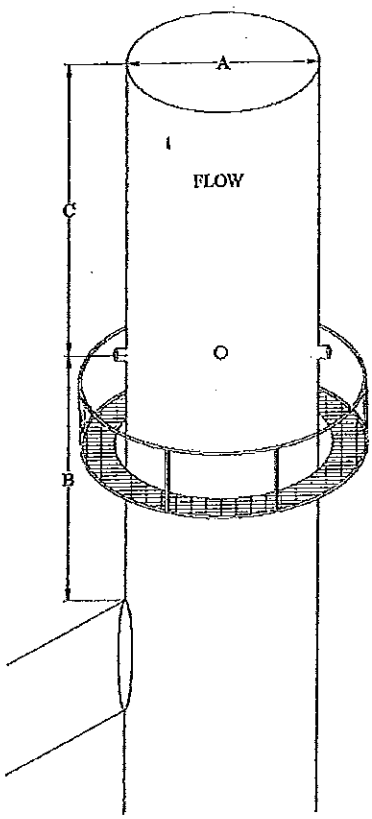
4.0 SAMPLING LOCATIONS

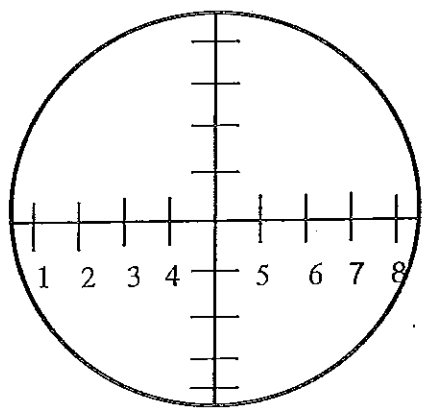
4.1 Flue Gas Sampling Location

Sampling took place from the outlet of the FBI. The test ports are located in the vertical stack that has an internal diameter of 42 inches. Four sampling ports were installed at 90° to each other and on the same plane. The test locations are accessed from a platform at the test location. The distance from the test ports to nearest upstream disturbance is 27' 1" (325"). The distance from the test ports to nearest downstream disturbance it 17' 8" (212"). A cyclonic flow check was conducted by CK personnel. The following diagram shows the test locations and defines the applicable dimensions.



*Not to scale

Figure 4-1
Traverse Point Locations



Point Number	Point Location (in)
1	1.3
2	4.4
3	8.1
4	13.6
5	28.4
6	33.9
7	37.6
8	40.7

Stack Dimensions

Description	Dimension
Port to downstream disturbance (C)	325" or 7.7 diameters
Upstream disturbance to port (B)	212" or 5.0 diameters
Duct diameter @ test location (A)	42"

Environmental

HNO_3/10% H_2O_2 absorbing solution. The third impinger was left empty. The fourth and fifth impingers contained 100 ml of 4% $KMnO_4$/10% H_2SO_4. The sixth impinger contained a pre-weighed amount of color indicating silica gel.

Prior to mobilization, all glass components of the multi-metals train were washed in hot water and detergent, thoroughly rinsed with tap water, soaked for at least 8 hours in a 10% nitric acid bath, rinsed clean with HPLC-grade water, rinsed with HPLC-grade acetone, allowed to dry, sealed and labeled. Prior to sampling, the isokinetic relationship was established, the train carefully assembled and leak checked. After the probe and filter box reach the desired operating temperature, the probe was placed in the stack, and isokinetic sampling took place.

Following each run, the samples were carefully recovered in the field laboratory. Each train yielded seven sample fractions: 1) the front half, which included the nozzle, probe, cyclone bypass and filter holder front half were rinsed with approximately 100 ml of acetone and a Teflon brush into a prepared container. 2) the front half was rinsed a second time with approximately 100 ml of 0.1N HNO_3 acid into a prepared glass amber jar. 3) The filter was carefully removed and placed in a petri dish. 4) The back half, including the filter frit, filter holder back half, and the knock-out, first and second impingers and their contents were quantitively recovered and rinsed with 0.1N HNO_3 into a separate prepared amber jar. 5) the third impinger contents were quantitively recovered and rinsed with 0.1N HNO_3 into a separate prepared amber jar 6) The fourth and fifth impingers and their contents were quantitively recovered and rinsed into a glass amber jar with 100 ml of 4% $KMnO_4$ / 10% H_2SO_4 and 100 ml distilled water. 7) The fourth and fifth impingers were further rinsed with 8N HCl into an amber jar containing 200 ml of distilled water to remove any $KMnO_4$ / H_2SO_4 residue.

The impinger weights were recorded before and after testing to determine the moisture net gain. The silica gel in the last impinger was weighed to determine moisture content and discarded. All samples were labeled, logged, and stored in a cool, dark area until delivery to the analytical laboratory. A set of reagent blanks were also taken for analysis along with the samples.

5.2 Description of CEM Sampling

5.2.1 CEM Sampling System

The transportable (trailer) continuous emissions monitor system that was used is measure O_2, CO_2 and THC is described below. The system meets all the specifications of Reference Methods 3A (O_2/CO_2) and 25A (THC).

Sample Probe - A stainless steel probe of sufficient length was used to sample the location specified in Section 4.0.

Excel spreadsheet for calculation of interval averages, and, ultimately emission concentrations and emission rates. Preliminary data were available on-site.

5.2.2 CEMS Sampling Procedures

All gaseous emission sampling procedures were conducted in accordance with EPA Reference Methods 3A and 25A (40CFR60, Appendix A). The following is the sequence of events leading up to and including the test:

Selection of Sampling Traverse Point Locations - Sampling point locations were determined prior to testing in accordance with EPA Method 3A and 25A requirements.

Determination of System Response Time - System response time was determined prior to testing. System response time was determined according to procedures delineated in Performance Specification 2 (40CFR60, Appendix B).

Determination of Analyzer Calibration Error - Analyzer calibration error was determined immediately prior to testing in accordance with EPA Methods 3A and 25A.

Determination of Sampling System Bias - Sampling system bias was determined immediately prior to testing in accordance with EPA Methods 3A and 25A.

Determination of Zero and Calibration Drift - Before and after each test run, each analyzer's response to zero and mid- or hi-range calibration gases was determined. The pre-and post-test analyzer responses were compared to determine drift. The results were evaluated based upon specifications defined in EPA Methods 3A and 25A.

Data Reduction - An average pollutant/diluent concentration for each time interval was determined from the data acquisition system. This data was then reduced to determine relative pollutant concentrations and emission rates. Calculations were performed in accordance with the specifications of the methods.

Figure 5-1 presents a diagram representative of the EPA Method 3A sampling system. **Figure 5-2** presents a diagram representative of the EPA Method 25A sampling system.

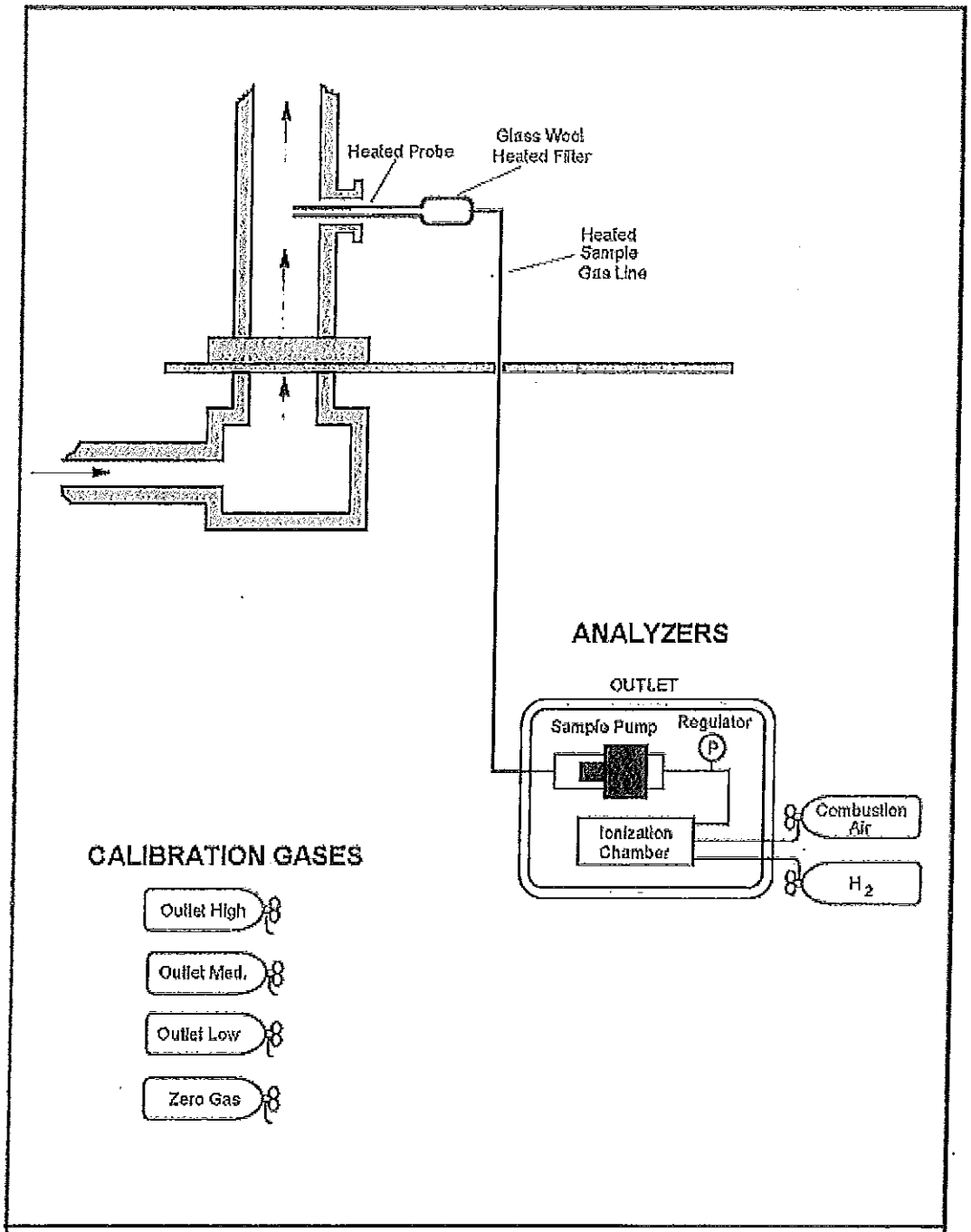


Figure 5-2 THC/VOC Test System

Environmental

submitted for analysis for all reagents and filters used in sampling. Samples were transferred to the appropriate (glass or Nalgene bottles or petri dishes) containers which were then labeled for identification, volumes noted and liquid levels marked.

Chain of custody documentation was initiated in the field and maintained on all samples from their recovery through inter-laboratory transfer until their final analysis. Upon CK Environmental's return from the field, samples were assigned a sample bank number and logged into the master sample logbook.

Analysis was conducted in accordance with the specific methods using proper laboratory procedures. Qualified analytical laboratories conducted subcontracted laboratory work. Analytical results were used to calculate stack gas pollutant concentrations and emission rates. All calculations were conducted in strict accordance with the equations found in the individual methods. Isokinetic and emission rate calculations were conducted on a computer and the input data checked by a person other than the original calculator to ensure that it is correct.

6.1.2 EPA METHOD 29 MULTI METALS

Prior to field testing, extensive preparation is necessary to properly complete the test method. All glassware including probe liners, filter holders, impingers, connecting pieces, and sample containers, are thoroughly washed with detergent and tap water. The glassware is then soaked in a 10% HNO3 bath for a minimum of eight hours, rinsed with DI H2O, rinsed with high purity acetone and allowed to air dry before sealing with parafilm.

The sampling train is loaded by a qualified chemist and carefully assembled by a qualified engineer. Sampling is conducted in accordance with EPA Method 29 procedures for 2 hours at a flow rate of less than 1.0 cfm.

Blanks are collected for all reagents in the field laboratory and are analyzed along with the test samples to determine the level of contamination introduced by field handling and background contamination.

Samples are recovered following procedures outlined in the method. The filter is carefully removed and placed in a petri dish. The nozzle, probe, cyclone bypass and filter holder front half are rinsed 3 times with 0.1N HNO3 into a prepared container (#1). The first, second, third and fourth impingers are quantitatively recovered and rinsed 3 times with 0.1N HNO3 into container #2 along with the rinses from the filter holder back half and all connecting glassware. The fifth and sixth impingers are quantitatively recovered and rinsed with acidic potassium permanganate into separate container (#3). The silica gel in the seventh impinger is measured to complete the moisture determination. All volumes used in the recovery are recorded.

Environmental

TABLE 6-1
QA/QC Procedures for Trace Metals – EPA Method 29

Task	Procedure
Glassware/Teflon Preparation	1. Wash all glassware and Teflon components in warm, soapy water. Rinse clean with tap water. Rinse thoroughly with DI water. 2. Soak all components in 10% nitric acid for 8 hours. Rinse all train components with DI water and acetone. Allow to air dry and seal with parafilm. 3. Use only high purity quartz filters and glass or Teflon components.
Sampling Train Set up	1. Load/assemble sampling train components in field lab. Re-seal components and send up to stack. 2. Finish assembling train on stack. Leak check train with Teflon tape on finger.
Sampling Train Operation	1. Operate sampling train between 0.5 and 1.0 cfm. 2. Leak check train with Teflon tape on finger. Seal train components with parafilm.
Sampling Train Recovery	1. Rinse nozzle through front half of filter holder with 0.1N HNO3 into container 1. 2. Rinse filter holder back half through fourth impinger with 0.1N HNO3 into container 2 along with condensate. 3. Rinse fifth and sixth impinger impingers with acid potassium permanganate into container 3 along with condensate. 4. Return filter to petri dish. 5. Use Teflon squeeze bottles, spatulas for recovery. 6. Obtain reagent and filter blanks.
Sample Identification And Shipping	1. Identify all samples by stack, method, run no., fraction and contents. 2. Generate chain of custody form identifying all samples. 3. Ship samples to analytical laboratory.
Sample Analysis	1. Receive samples, verify chain of custody/contents. 2. Calibrate instrumentation with standards prior to sample analysis. Calibration is verified with a lab control sample to verify the primary standard. Must be within 10% of true value 3. Inject field emissions samples in duplicate to demonstrate reproducibility (20% agreement). 4. A continuing calibration check is performed every 10 samples (20 injections). At completion, a final calibration verification is performed (20% agreement). 5. Spike separate sample aliquot with a known amount of standard for each analyte (one for front ½ and one for back ½ samples), and analyze along with emissions samples. The spike recovery must between 70% and 125% to be considered acceptable.

Environmental

Appendix A

Reduced Field Data

Table 3-2
Summary of Total Hydrocarbons & Multiple-Metals Emissions Testing
Veolia Water North America LLC
September 17, 2013

CK Environmental

Test Run No.		Incinerator Out Metals-1	Incinerator Out Metals -2	Incinerator Out Metals 3	
Date		09/17/13	09/17/13	09/17/13	
Time	Start	7:45	10:15	12:45	Average
	Stop	9:51	12:20	14:49	
Sample Conditions					
Volume	(dscf)	94.51	98.71	100.00	
	(dscm)	2.676	2.795	2.832	
Isokinetics	(%)	98.4	101.2	98.3	
Sludge Feedrate	(dry Ton/hr)	3.71	3.45	3.62	3.59
Stack Conditions					
Flow Rate	(dscfm)	14,792	15,315	15,658	15,255
Temperature	(°F)	247.4	241.8	240.9	243.4
Moisture	(%)	7.7	7.4	9.2	8.1
Oxygen	(%)	6.82	6.67	6.71	6.7
Carbon Dioxide	(%)	12.0	12.1	12.1	12.1
Carbon Monoxide	(ppm)	4.8	5.7	5.2	5.2
Non-Methane Hydrocarbons	(ppm)	1.4	1.5	1.6	1.5
Trace Metals					
Arsenic (As) Catch	(mg)	0.001	0.001	0.001	0.001
As Concentration	(ug/dscm)	0.2242	0.2147	0.2119	0.2169
As Emission Rate	(lb/hr)	0.00001	0.00001	0.00001	0.00001
Beryllium (Be) Catch	(mg)	0.000	0.000	0.000	0.000
Be Concentration	(ug/dscm)	0.0561	0.0537	0.0530	0.0542
Be Emission Rate	(lb/hr)	0.00000	0.00000	0.00000	0.00000
Cadmium (Cd) Catch	(mg)	0.005	0.000	0.000	0.002
Cd Concentration	(ug/dscm)	1.87967	0.05367	0.13771	0.69035
Cd Emission Rate	(lb/hr)	0.00010	0.00000	0.00001	0.00004
Chromium (Cr) Catch	(mg)	0.006	0.010	0.007	0.0077
Cr Concentration	(ug/dscm)	1.3266	2.7513	1.5007	1.8596
Cr Emission Rate	(lb/hr)	0.00007	0.00016	0.00009	0.00011
Copper (Cu) Catch	(mg)	0.007	0.009	0.005	0.0068
Cu Concentration	(ug/dscm)	0.3857	3.4633	0.0855	1.3115
Cu Emission Rate	(lb/hr)	0.00011	0.00014	0.00007	0.00011
Lead (Pb) Catch	(mg)	0.005	0.007	0.005	0.005
Pb Concentration	(ug/dscm)	1.46487	2.11449	1.41243	1.66393
Pb Emission Rate	(lb/hr)	0.00008	0.00012	0.00008	0.0001
Manganese (Mn) Catch	(mg)	0.054	0.012	0.027	0.031
Mn Concentration	(ug/dscm)	19.1293	3.3953	8.6123	10.3790
Mn Emission Rate	(lb/hr)	0.00106	0.00019	0.00050	0.00059
Mercury (Hg) Catch	(mg)	0.236	0.259	0.205	0.233
Hg Concentration	(ug/dscm)	88.1489	92.7440	72.1474	84.3468
Hg Emission Rate	(lb/hr)	0.00488	0.0053	0.00423	0.0048
Nickel (Ni) Catch	(mg)	0.010	0.022	0.010	0.014
Ni Concentration	(ug/dscm)	2.9895	7.1199	2.7542	4.2879
Ni Emission Rate	(lb/hr)	0.00017	0.00041	0.00016	0.00024
Selenium (Se) Catch	(mg)	0.018	0.018	0.031	0.022
Se Concentration	(ug/dscm)	6.2780	6.0823	10.4873	7.6159
Se Emission Rate	(lb/hr)	0.00035	0.00035	0.00061	0.00044
Zinc (Zn) Catch	(mg)	0.050	0.077	0.067	0.065
Zn Concentration	(ug/dscm)	16.6667	25.6172	21.7514	21.3451
Zn Emission Rate	(lb/hr)	0.00092	0.00147	0.00127	0.00122

ODOR COMPLAINT REPORT

CALLER INFORMATION: DATE: 10/2/13 TIME: 5:51 pm

CALL TAKEN BY: Odor Hotline

NAME OF COMPLAINTANT: Jennifer Merrill PHONE 206-0467 203-

NUMBER:

ADDRESS/LOCATION WHERE ODOR IS BEING DETECTED:

63 Meadow Brook Place

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!!

smelt since 4pm of exit 25

ODOR INVESTIGATION:

(FROM CONTROL ROOM WEATHER STATION)

WIND DIRECTION: W WIND SPEED: 5.0 WEATHER: TEMP 78 RAIN 0 HUMID 70 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 8.71 ORP 841 MAKE UP WATER: 0.5-1 GPM ✓ SPRAYS ✓

FILTER BLDG SCRUBBER: ON ✓ OFF ___ PH 8.86 ORP 824 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 9

COMPLAINT REVIEWED BY: J Batorski DATE: 10-3-13 TIME: ~ 9AM

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

RETURN CALL RESULTS:

No cause determined

Phil 10/8

P. 88

AIR QUALITY
LOG NUMBER: 2013-0597

REVISED 09/03/2003
FORM AE – 501

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT
COMPLIANCE & FIELD OPERATIONS
79 ELM STREET, HARTFORD, CT 06106

Alleged Source: VEOLA WATER TREATMENT PLANT
Complaint Date: 10/3/2013

Source Address: 500 CHERRY STREET
Complaint Time Received: 7:19:00 AM

Town Name: NAUGATUCK, CT
Priority: ☐ A ☐ B ☒ C

☐ Smoke
☐ Fugitive Dust
Odor
☐ M.V. Exhaust
☐ Spray Paint
☐ Other
☐ Soot
☐ Open Burning

This event occurs mostly on what DAY of the week? →
This event occurs mostly at what TIME of day?
When First Noticed? When Last Noticed?

☐ Monday ☐ Friday
☐ Tuesday ☐ Saturday
☐ Wednesday ☐ Sunday
☐ Thursday ☒ Every Day

Other pertinent details:

VEOLA WATER TREATMENT PLANT HAS BEEN EMITTING A VERY STRONG PERFUME ODOR TO COVER UP THEIR LOAD. IT'S SO BAD THAT HIS CHILDREN CAN'T STAND OUTSIDE AND WAIT FOR THE SCHOOL BUS. HE CAN'T OPEN HIS WINDOWS.

COMPLAINANT INFORMATION:		COMPLAINANT TELEPHONE NUMBER:	COMPLAINT RECEIVED BY:
Complainant:	ANONYMOUS	Home Phone:	C. Wilson
Address:		Work Phone:	SUMITTED BY ☒ By phone ☐ By letter ☐ In person ☐ Other
City:		Extension No. Mobile Phone:	
EPA 100-Ton Perm?	☐ Yes ☒ No	Assigned Date / Eng. ID:	

OFFICE

REMARKS:

Scheduled:

CLIENT SEQUENCE TOWN 0 PREMISE ☐ A ☐ B

☐ LOG IN Date: 0 ☐ LOG OUT Date: 0

INVESTIGATOR

ACTION:
☐ No Violation noted
☐ On the spot correction
☐ Order Referral
☐ NV issued No.

☐ Reg. Section Violation:
☐ Keep under surveillance
☐ Other
Investigation Conducted by:
Report Returned:

Correct Name & Address of Company:

Violation Source:

Contact made with the Complainant: ☐ TELEPHONE ☐ LETTER ☐ OTHER

Referral to: ☐ LOCAL HEALTH ☐ EXTERNAL ☐ OTHER (Specify) Date:

SUPERVISOR

☐ FILE ☐ OTHER (SPECIFY)

Supervisor Initials: Date:

COMPLAINT INSPECTION REPORT

Person's Contacted: ☐ In Person ☐ By Telephone LOG NO: 2013-0597

COMPLAINANTS Complainants Info. (Correct if it's different)

NAME: ANONYMOUS
ADDRESS:
CITY: STATE: CT ZIP CODE:

Source Personnel: P Cloudy ~55°F Title:

Climatic Conditions: ☐ Clear ☐ Overcast ☐ Precipitating Wind Direction:

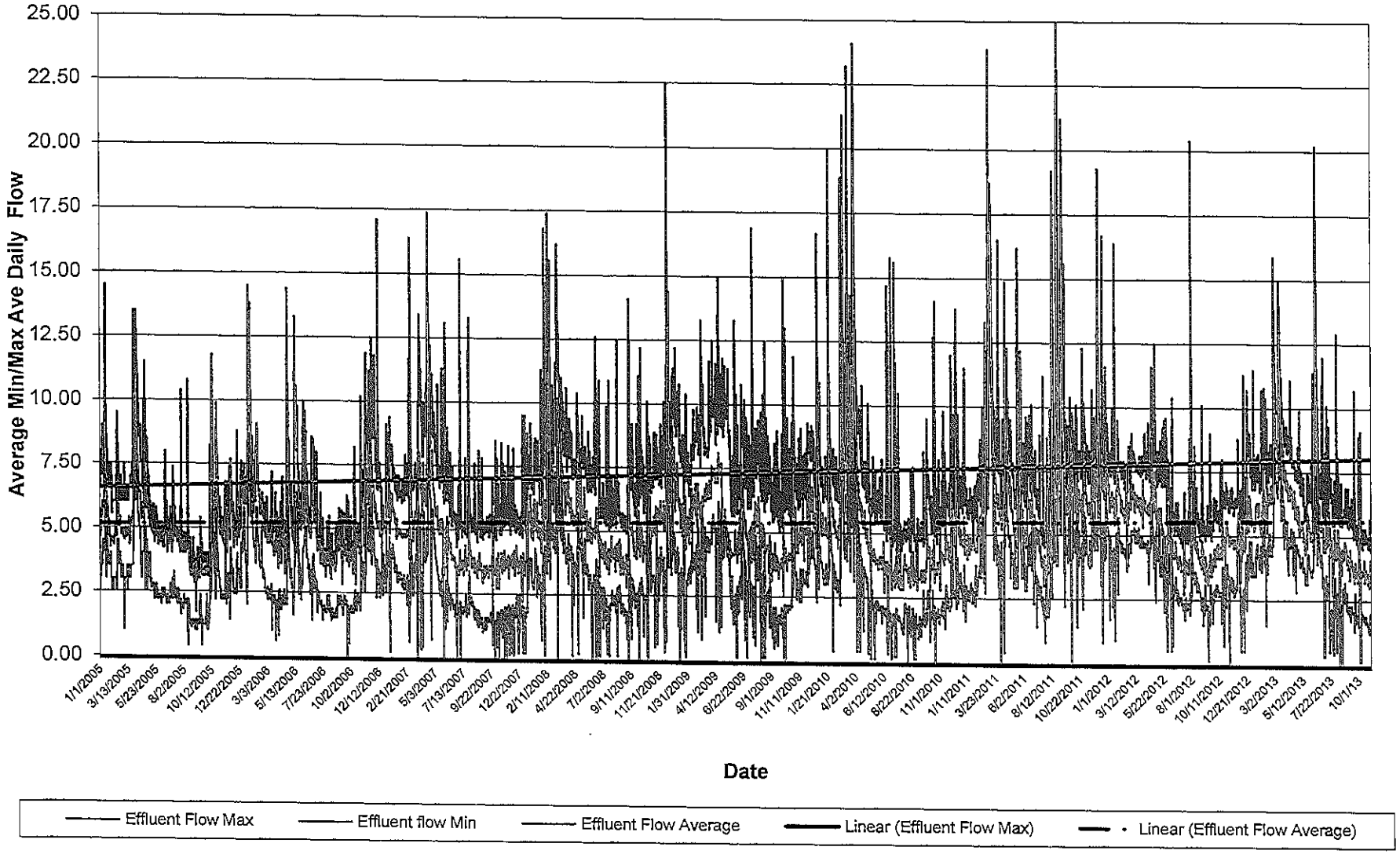
OBSERVATIONS: Date 10/9/13 Time-Start: 9:09 AM Time-Ended:

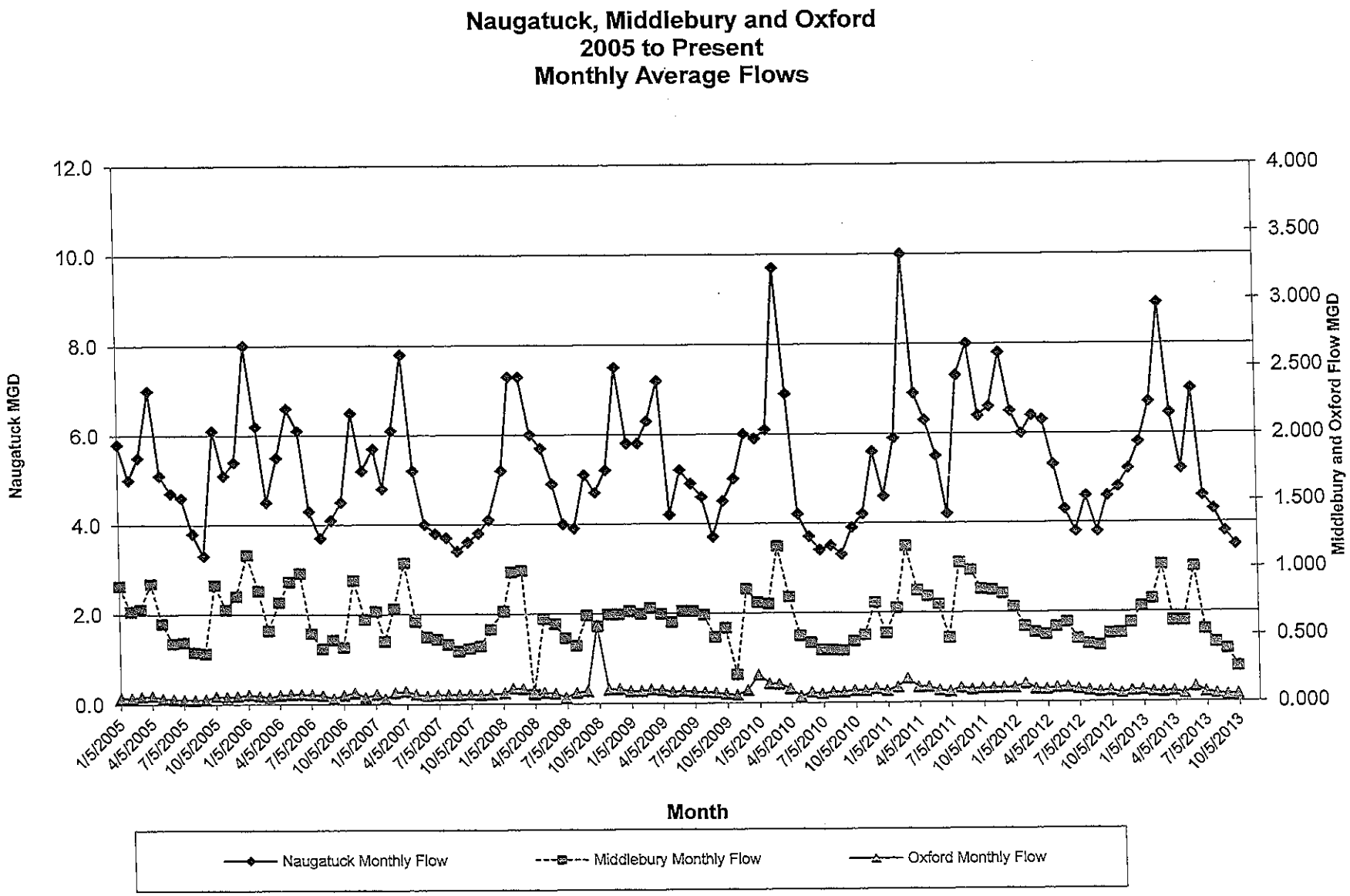
9:10 Alongside Cross St exit ramp very mild sewage odor N 5-10 mph
9:20 Commuter lot walked across baseball field no odor
9:28 Drove along ~~[illegible]~~ Andrasko Rd. no odors
9:35 St James Cemetery no odors
9:42 Meadowbrook no odor
9:50 Cross St. exit moderate sewage odor

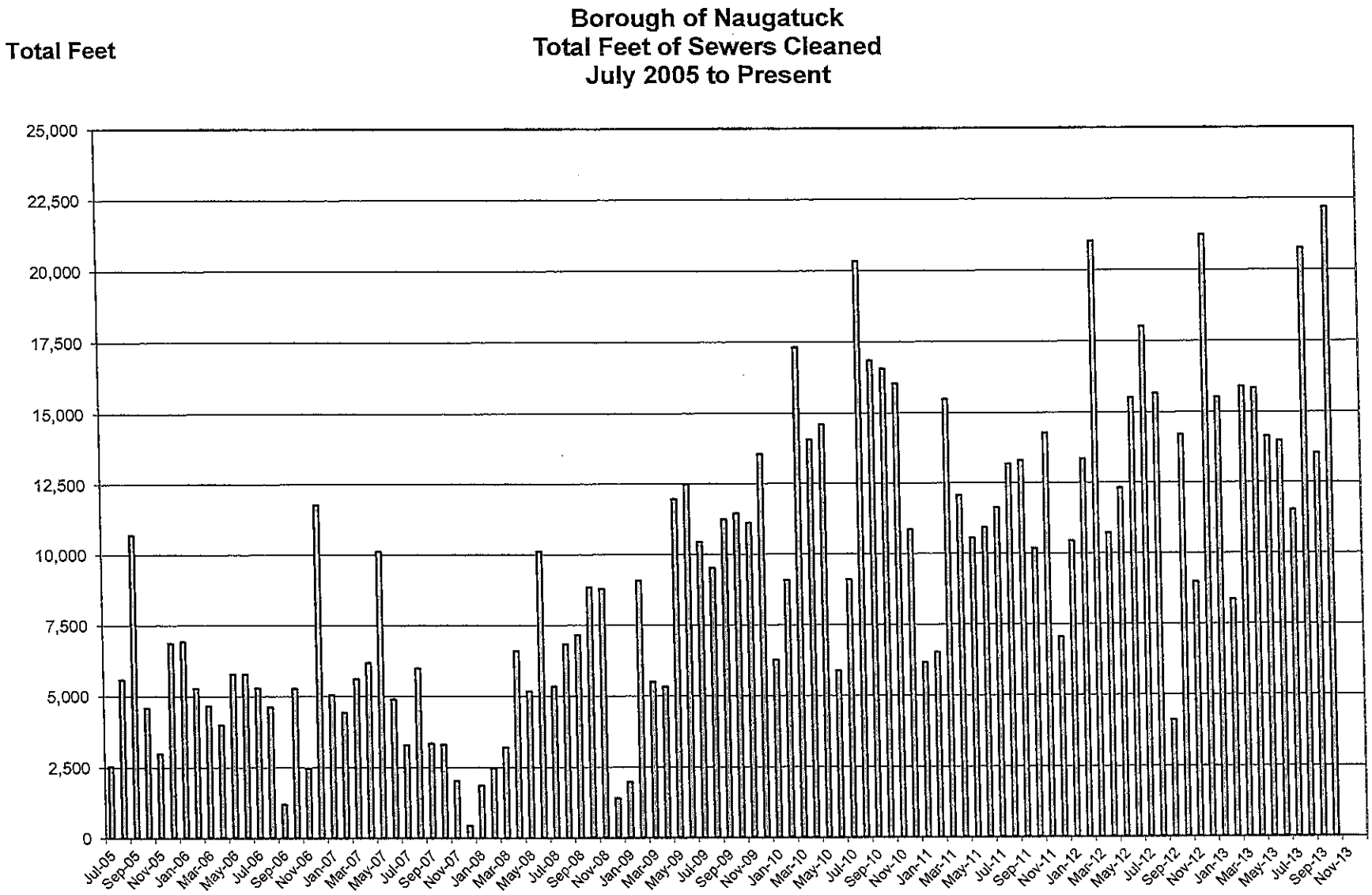
RECOMMENDATIONS:

Signature: Date:

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




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
7/5/2006
10/5/2006
1/5/2007
4/5/2007
7/5/2007
10/5/2007
1/5/2008
4/5/2008
7/5/2008
10/5/2008
1/5/2009
4/5/2009
7/5/2009
10/5/2009
1/5/2010
4/5/2010
7/5/2010
10/5/2010
1/5/2011
4/5/2011
7/5/2011
10/5/2011
1/5/2012
4/5/2012
7/5/2012
10/5/2012
1/5/2013
4/5/2013
7/5/2013
10/5/2013
Month
Naugatuck Monthly Flow
Middlebury Monthly Flow
Oxford Monthly Flow


Borough of Naugatuck
Total Feet of Sewers Cleaned
July 2005 to Present
Total Feet
25,000
22,500
20,000
17,500
15,000
12,500
10,000
7,500
5,000
2,500
0
Jul-05
Sep-05
Nov-05
Jan-06
Mar-06
May-06
Jul-06
Sep-06
Nov-06
Jan-07
Mar-07
May-07
Jul-07
Sep-07
Nov-07
Jan-08
Mar-08
May-08
Jul-08
Sep-08
Nov-08
Jan-09
Mar-09
May-09
Jul-09
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Nov-09
Jan-10
Mar-10
May-10
Jul-10
Sep-10
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13
Sep-13
Nov-13