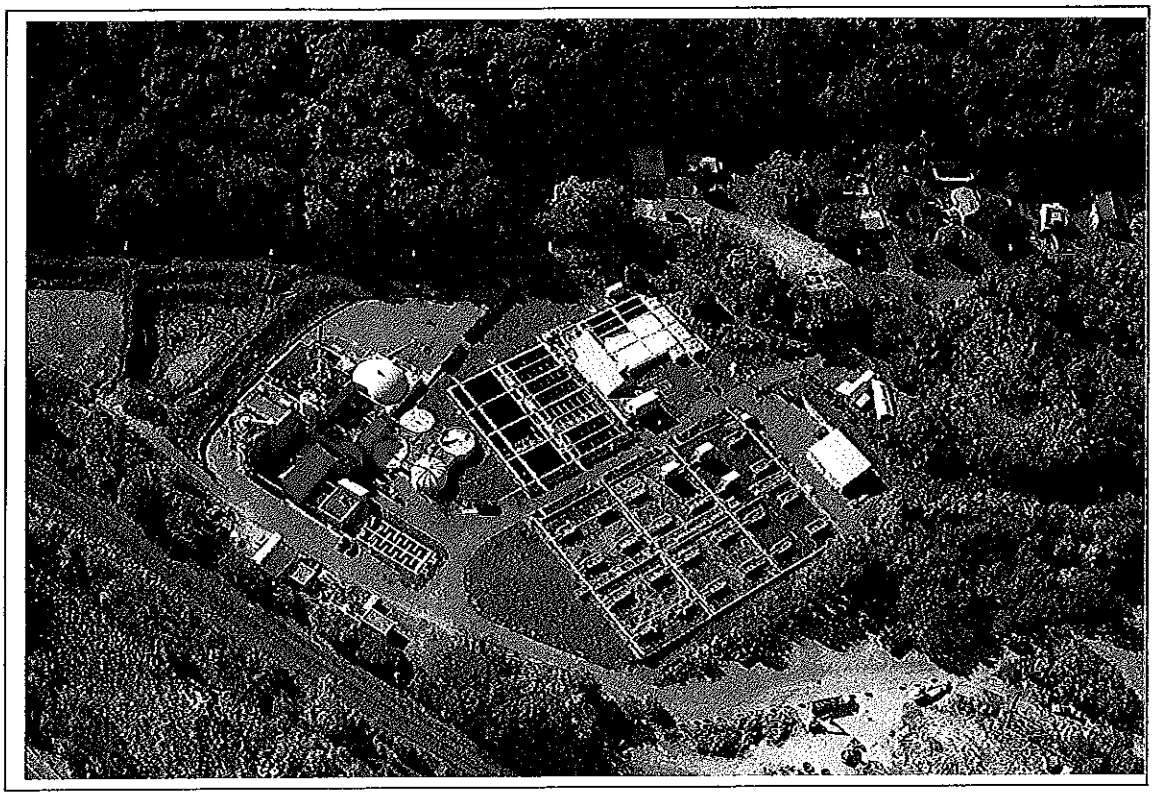

Borough of Naugatuck
Water Pollution Control Facility
Monthly Operating Report
March 2014

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VEOLIA
WATER

April 9, 2014

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

Re: **March 2014 Monthly Operating Report**

Dear Mr. Merancy:

Enclosed please find Veolia Water's Monthly Operating Report for the month of March 2014.

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

Sincerely,
Veolia Water North America – Northeast, LLC

John Batorski

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 March 2014

This report summarizes the activities at the Borough POTW for March 2014:

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.	-	177
Effluent Avg.	30	5
Removal Efficiency	85%	97%
Plant Process Data*	Limit	Actual
Carbonaceous BOD		
Influent Avg.	-	125
Effluent Avg.	30	4
Removal Efficiency	85%	97%

Discharge Permit Exceedance: None

	Naugatuck	Middlebury	Oxford	OTR
Apr Flow Avg. (MGD)	6.39	0.329	0.078	N/A
Sludge Liquid Total (MGal)				4.111
Sludge Cake Total (Wet Tons)				6322.2
Septage Total (MGal)	17,750	18,750	92,750	424,050

Discharge Permit Exceedance: None

Safety Incidents and Odor Complaints

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

1. **Compliance & Regulatory Issues**
   - **a.** There was one recorded Odor Complaint for March 2014.
   - **b.** No update regarding the proposed NPDES permit.

2. **Personnel**
   - **a.** A Maintenance employee was terminated as he violated the Drug and Alcohol policy.

3. **.Health & Safety**
   - **a.** Monthly safety meetings were held.
   - **b.** On March 17, 2014, Benn Bullock and Kevin Beirnacki (Veolia Safety Dept.) were onsite for a safety walk through.
   - **c.** On March 12, 2014 a quarterly safety audit was performed by the Phil Harding safety coordinator from the Southbridge project.

4. **Operational Information**
   - **a.** The plow/sanding lease truck finally arrived in early March 2014.
   - **b.** The incinerator operated for 2 days bypassing the thermal dryer at approximately 70% capacity while the hot oil rotary seal for the thermal dryer was replaced.
   - **c.** The top section of the incinerator exhaust cap developed another crack in the weld. Repairs will be scheduled.
   - **d.** Spirac will bring 6 personnel from Carollo Engineering in Texas on Tuesday, April 1, 2014 to tour the Spirac equipment.
   - **e.** A new door/glass panel was installed at the rear entrance to the employee locker room.
   - **f.** A third liquid sludge unloading line was installed. It will be primarily for septage to avoid liquid sludge unloading delays.
   - **g.** The lower portion of the Admin basement/equipment has been painted.

5. **Collections**
   - **a.** Collections personnel have their own work area now that the maintenance shop has been organized. They have one entire wall covered with a sewer map of the Borough. They will use dry erase markers to highlight their jetting progress and trouble areas.
   - **b.** The transfer switch failed at the Platts Mill pump station and a new unit has been ordered.

6. **Maintenance**
   - **a.** The third new raw sewage pump installation is well underway. We expect it to be complete by mid- April.
   - **b.** The hot oil duct spray actuator was replaced.
   - **c.** The new hot oil heat exchanger project is underway. The piping portion of that project should be complete by the end of April.
   - **d.** The rotary seal for the thermal dryer was rebuilt.
   - **e.** New grating was installed in the wet well replacing the original Cyprus planks.
   - **f.** The lighting was replaced in the Maintenance shop.
   - **g.** The discharge gate actuator was replaced on the north centrifuge.
   - **h.** The flushing water piping for the liquid sludge unloading was replaced.

6. **Capital Projects**

   No report.

Borough of Naugatuck
Collections Systems Report
March 2014

VEOLIA WATER

	Calls for Service
1	Intersection of May St. & High St. 03/02/14
2	46 Pleasant View St. 03/06/14
3	283 Millville Ave 03/27/14 main was clear
4	
5	
6	

This Month	Year to Date
3	16

	Calls Caused By Collection System	Reason
1	May St. / High St. 03/02/14	Pipe clogged with rags between MH 10-150 & 10-150A .
2	Pleasant View St. 03/06/14	Pipe collapsed upstream from 9-189A
3		
4		

High Velocity Cleaning

	Street Name	Date	Footage
1	May St / High St. 10-150 to 10-150A	3/2/2014	50
2	Charles Ct. 12-25 to 12-19	3/3/2014	125
3	Charles Ct. 12-3 to 12-19	3/3/2014	110
4	Charles Ct. 12-22 to 12-19	3/3/2014	450
5	Elm St. 10-210 to 10-209	3/5/2014	390
6	Elm St. 10-212 to 10-208	3/5/2014	170
7	Elm St. 9-31A to 9-31B	3/5/2014	75
8	Pleasant View St. 9-189A upstream	3/6/2014	46
9	Pleasant View St. 9-189A upstream	3/7/2014	100
10	Pleasant View St. 9-189A upstream	3/10/2014	100
11	Gorman St. 9-54 to 9-57	3/11/2014	635
12	Gorman St. 9-75 to 9-76	3/11/2014	730
13	Fairchild St. 9-57 to 9-60	3/11/2014	475
14	North Circle. 9-134 to 9-130	3/12/2014	175
15	South Circle. 9-130 to 9-131	3/12/2014	200
16	Fuller St. 10-165 to 10-164	3/12/2014	200
17	Brookside Ave. 9-129 to 9-130	3/12/2014	710
18	South Circle Easement. 9-136 to 9-130A	3/19/2014	450
19	Melbourne Easement. 9-126 to 9-127	3/19/2014	550
20	Locust St. 7-126A upstream	3/24/2014	120
21	Casper Ct. 6-126A to 6-127	3/25/2014	510
22	Fern St. 6-294 to 6-296	3/27/2014	480
23	May Ave. 6-291 to 6-299	3/27/2014	220
24	Ward St. 12-17 to 10-212	3/28/2014	1800
25	Cherry St. 9-73 to 12-19	3/28/2014	365
26	Cherry St. 12-2A to 12-3	3/28/2014	250
27	Chrch St. 9-2 to 9-211D	3/28/2014	350
28	Cherry St. 9-53 to 9-73	3/28/2014	400
29			
30			
51			1

6 month list
Call for service

This Month		Year to Date	
10236	Feet	108699	Feet

Root Treatment

	Street Name	Type	Footage
1			
2			
3			1

This Month		Year to Date	
1	Feet	4685	Feet

Video Inspections

	Street Name	Type	Footage
1	May St / High St 10-150 to 10-150A	cctv	50
2	Pleasant View St from 9-189A upstream	cctv	200
3	Brookside Ave from 9-134 downstream	cctv	200
4	Picture Ln from 7-121 downstream	cctv	200
	Woodbine 7-265 to 7-264	cctv	46
5	Locust / Picture Ln 7-108 to 7-125	cctv	200

This Month		Year to Date	
896	Feet	5129	Feet

Pump Station Services

	Work performed	Location	Date	Notes
1	Pump Station Services	All 5	3/6/2014	
2	Pump Station Services	All 5	3/14/2014	
3	Pump Station Services	All 5	3/21/2014	platts draw down measurement at various depth
4	Pump Station Services	All 5	3/28/2014	
5				
6				
7				

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Pump 3
Inwood	End Reading	567.7	2330.6	2552.6
	Start Reading	538.2	2304.1	2519.4
	Hrs Run	29.5	26.5	33.2

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
MAPLE & MAY	End Reading	32305.7	
	Start Reading	32241.5	
	Hrs Run	64.2	0

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Platts Mill	End Reading	3394.4	4094.7
	Start Reading	3309.8	4004.6
	Hrs Run	84.6	90.1

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Hopbrook	End Reading	920.6	635.9
	Start Reading	906	628.6
	Hrs Run	14.6	7.3

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
HORTON HILL	End Reading	6955.8	8960.7
	Start Reading	6868.1	8904.4
	Hrs Run	87.7	56.3

Vac Truck Information

Days out of the plant working		
This Month	YTD	Remaining
15	117	33

Fuel Information	Fuel Cost	Fuel Used			
	$305.31	68.1	Gallons	YTD Gallons	
			Gallons	818.0	Gallons
			Gallons		
			Gallons	YTD Fuel Cost	
This Months Total	$305.31	68.1	Gallons	$3,612.07	

	Mileage		Engine Hours
Month Start	171810	Month Start	4840.5
Month End	172336	Month End	4875.5
Total	526	Total	35

Utlity Truck Information

Fuel Cost	Fuel Used		
$143.70	32.08	Gallons	YTD Gallons
$143.01	31.93	Gallons	436.75
		Gallons	
		Gallons	YTD Fuel Cost
$286.71	**64.01**	Gallons	$1,871.34

Other tasks and notes

1	03/05/2014 Picked up new Ford F550 Dump Body
2	03/06/2014 Jetted secondary draft tubes on tank #1
3	03/07/14 - 03/11/14 Pleasant View St pipe repair
4	03/12/2014 Assisted G&L Excavating with raising Auburn st MH
5	03/14/2014 Jetted secondary draft tubes in Tank #1
6	03/14/2014 Vac out and clean Hopbrook pump station
7	03/17/2014 De-rag pump at Maple & May pump station
8	03/19/2014 Remove skimmings at plant
9	03/20/2014 Vac out and clean Platts Mill pump station
10	03/21/2014 Assisted in G&L Excavating at Summerfield seperated pipe repair.
11	03/24/2014 Platts Mill pump draw down on pump #1 at working level
12	03/24/2014 Platts Mill pump draw down on pump #2 at working level
13	03/25/2014 Platts Mill inflow measurement at working level
14	03/27/2014 Located MH 7-259 and uncover clean out on Golden Hill St
15	
16	
17	
18	
19	
20	

VEOLIA
WATER

Sent Certified R.R.R. mail #7009 2820 0004 1018 0903 on April 9, 2014

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

April 9, 2014

Re: March 2014 Reports for Naugatuck, CT WPCF, NPDES # CT0100641

Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report and Nutrients Analysis Report* for the month of March 2014. The *Nutrients Analysis Report for Compliance with General Permit for Nitrogen Discharges* and *Discharge Monitoring Report* were submitted electronically.

Also enclosed is a summary of sludge sources received at this facility during the month of March.

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: Mar,2014
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.	%	wt.	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.	solids	lbs.			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	7.0	3.6	5.4						2.60	0.70	156		3,956	180,900	3,450										
02	6.7	3.7	5.4						2.60	0.70	157		3,956	175,152	3,000										
03	6.3	5.2	4.8				4,988	93	2.40	0.70	158	0.86	2,743	143,198	23,300		99	73	<4	110	64	<5	0.0	3.7	
04	9.8	3.3	5.0				6,224	80	2.50	0.60	162	0.92	6,227	146,142	20,050		120	83	<4	160	75	<5	0.0	1.9	
05	6.5	3.4	5.2				4,458	100	2.60	0.80	160	0.87	2,943	153,228	16,000		120	73	<4	170	61	<5	0.0	1.9	
06	6.1	3.5	4.9				4,450	101	5.00	0.60	175	0.76	3,233	163,779	7,450								0.0	2.7	
07	5.9	3.1	5.0				5,858	85	2.60	0.50	180	0.85	4,700	181,902	11,500								0.0	4.2	
08	6.8	3.3	5.1						2.50	0.90	171		3,615	171,612	4,500										
09	6.7	3.5	5.0						2.50	0.70	162		3,615	184,008	0										
10	6.6	3.5	5.6				5,864	92	2.50	0.80	153	0.81	5,512	182,244	19,750		180	120	<4	230	100	<5	0.0	2.3	
11	7.1	3.9	5.3				4,770	96	2.60	0.60	149	0.85	3,594	174,024	22,250		120	70	<4	310	54	<5	0.0	3.0	
12	8.1	4.3	7.1				4,896	94	2.60	0.80	128	0.93	5,459	177,468	23,700		140	89	<4	210	120	5	0.0	2.9	
13	7.6	5.1	6.0				4,530	97	2.90	0.80	157	0.90	15,695	180,108	12,300								0.0	2.6	
14	7.0	4.4	5.7				4,622	93	2.70	0.70	157	0.87	4,047	174,744	21,000								0.0	3.1	
15	7.9	6.3	6.2						2.60	0.70	145		4,047	185,448	13,000										
16	7.8	4.0	6.4						2.80	0.80	135		4,268	190,800	3,750										
17	7.5	4.4	6.2				4,448	94	2.80	0.80	148	0.77	3,254	194,364	35,100		170	96	<4	210	110	7	0.0	2.6	
18	7.2	4.0	5.9				4,462	97	5.00	0.60	151	0.76	2,586	185,448	13,700		130	110	<4	230	88	<5	0.0	2.2	
19	7.4	4.4	6.5				8,286	77	2.50	0.70	137	0.76	5,172	185,772	23,000		110	94	<4	150	67	6	0.0	2.4	
20	9.2	5.9	7.7				4,386	94	2.40	0.80	113	0.87	2,960	187,236	21,500								0.0	3.8	
21	8.2	5.7	6.5				4,374	99	2.20	0.60	132	0.90	9,136	191,125	32,000								0.0	3.1	
22	8.6	5.0	6.8						2.40	0.70	129		6,091	170,568	7,500										
23	8.4	4.6	6.8						5.00	0.60	132		6,091	182,244	1,000										
24	7.9	4.2	5.9				3,560	121	5.00	0.00	137	0.77	0	185,772	37,950		160	190	<4	130	84	6	0.0	2.0	
25	8.5	4.4	6.2				4,420	98	2.50	0.70	142	0.80	2,029	133,620	27,950		100	74	<4	130	66	<5	0.0	2.5	
26	7.7	4.7	6.4				4,516	98	2.60	0.60	138	0.69	2,914	90,285	40,000		110		<4	160		<5	0.0	1.6	
27	7.5	4.2	6.2				3,464	101	2.30	0.50	140	0.68	0	141,170	27,250								0.0	1.9	
28	7.4	4.7	6.4				4,190	100	5.00	0.80	138	0.71	2,999	180,900	33,750								0.0	2.8	
29	8.3	4.4	6.7						2.30	0.60	132		2,999	180,900	7,500										
30	13.3	7.7	11.4						2.30	0.00	81		2,099	182,244	0										
31	13.7	6.2	10.9				3,738	98	5.00	0.00	84	0.85	13,154	161,364	40,100		67		<4	99		6	0.0	2.8	
TOT			194.6										139,095	5,317,767	553,300										
AVG	7.9	4.5	6.3				4,786	96	1.7	1.5	143	0.8	4,487	171,541	17,848		125	97	4	177	81	5	0.0	2.7	

I certify under penalty of law that this document and all attachments were prepared und 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: 4-9-14

	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	0.00	0.00																										
02	0.00	0.00																										
03	0.00	0.00				21.4	21.0	0.21	0.91	0.57	3.8	0.140	0.2	0.04	38.8	32.4	1.54	7.1	7.6	6.8	8.4	3.5	8.0	54	65	1.33	0.22	
04	0.00	0.00				22.2	23.4	0.13			2.2			0.01			1.76	7.2	8.9	6.7	7.9		8.0	54	65			
05	0.00	0.00				18.9	22.8	0.26			4.6			0.01			2.23	7.4	7.4	6.7				54	64			
06	0.00	0.00																7.7	7.3	6.6				53	65			
07	0.00	0.00																7.5	7.4	6.6				53	65			
08	0.00	0.00																										
09	0.00	0.00																										
10	0.00	0.00				20.2	20.4	0.22			3.8			0.03			2.10	7.1	7.3	6.6	9.8		10.0	55	70	1.97	0.36	
11	0.00	0.00				19.5	19.7	0.24			4.2			0.15			2.09	6.9	7.4	6.8	9.7		10.2	55	69			
12	0.00	0.00				18.0	19.5	0.22			3.8			0.08			1.95	7.0	7.4	6.8				55	69			
13	0.00	0.00																6.5	7.4	6.7				55	68			
14	0.00	0.00																9.0	7.3	6.8				51	63			
15	0.00	0.00																										
16	0.00	0.00																										
17	0.00	0.00				17.1	18.9	0.16			4.0			<0.01			1.79	7.2	8.6	6.7	8.0		8.5	55	66	2.12	0.33	
18	0.00	0.00				14.7	17.5	0.19			4.4			<0.01			1.90	7.6	7.3	6.7	8.3			56	65			
19	0.00	0.00				18.5	22.2	0.21			3.3			<0.01			2.04	7.6	7.3	6.6				56	67			
20	0.00	0.00																6.8	7.4	6.8				68	68			
21	0.00	0.00																7.0	7.2	6.6				55	66			
22	0.00	0.00																										
23	0.00	0.00																										
24	0.00	0.00				16.6	18.8	0.18			2.4			<0.01			1.73	6.6	7.3	6.6	8.0		8.3	54	67	2.19	0.31	
25	0.00	0.00				15.7	16.1	0.36			2.8			0.02			1.91	7.0	7.2	6.6	7.4		7.5	54	65			
26	0.00	0.00				18.5		0.36			3.2			0.02			1.87	6.7	7.2	6.6				55	64			
27	0.00	0.00																7.6	7.3	6.6				54	61			
28	0.00	0.00																7.1	7.2	6.6				56	63			
29	0.00	0.00																										
30	0.00	0.00																										
31	0.00	0.00				8.4		3.75			1.5			0.05			5.01	6.7	7.3	6.8				53	63			
TOT																												
AVG						17.7	20.0	0.50	0.9	0.6	3.4	0.1	0.2	0.03	38.8	32.4	2.15	7.2	7.5	6.7	8.4	3.5	8.6	55	66	1.90	0.31	

P10

Nutrient Analysis Report

Town/Facility: Naugatuck WWTF Flow Rate: 4.8 MGD Sampling Date: 03/03/14

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	21.4		21.0		0.2				
Nitrites	0.14		0.16		0.04				
Nitrates	0.9		0.6		3.8				
TKN	38.8		32.4		1.5				
Total Nitrogen	39.9	1,605	33.1	1,335	5.4	216			87
Orthophosphates	1.9	77			8.4	336			
Total Phosphorus	3.5	140			8.0	323			

Permit # CT0100641

VE IA WATER

Naugatuck Plant Samples by Intake Forecast Summary

Sample Date Range 3/1/2014 - 3/31/2014
Forecast Date Range 4/1/2014 - 3/31/2014
Number of Forecast Days: 0

Ansonia WPCA	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 39,000	0	39,000
Total Samples for Ansonia WPCA: 6		

Bates, Inc.	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 6,000	0	6,000
Total Samples for Bates, Inc.: 1		

Beacon Falls Treatment	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 123,500	0	123,500
Total Samples for Beacon Falls Treatment: 19		

Bennett Septic	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 197,000	0	197,000
Total Samples for Bennett Septic: 52		

Bill Dunn Sanitation	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 13,400	0	13,400
Total Samples for Bill Dunn Sanitation: 7		

Bill Marek Excavating & Septic Systems	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 33,000	0	33,000
Total Samples for Bill Marek Excavating & Septic Systems: 11		

Bill Roy Septic	Forecasted New Intake	Forecasted Total
Liquid Sludge		
Total Gallons: 9,600	0	9,600
Total Samples for Bill Roy Septic: 2		

Bristol	Forecasted New Intake	Forecasted Total
Cake Sludge		
Total Tons: 542.51	0	543
Total Samples for Bristol: 25		

Casella Chicopee	Forecasted New Intake	Forecasted Total
Cake Sludge		
Total Tons: 468.83	0	469
Total Samples for Casella Chicopee: 18		

Casella Glen Cove	Forecasted New Intake	Forecasted Total
Cake Sludge		
Total Tons: 242.08	0	242
Total Samples for Casella Glen Cove: 19		

Casella Suffolk NY	Forecasted New Intake	Forecasted Total
Cake Sludge		
	0	1,740

P12

Total Samples for Casella Suffolk NY: 65

	Forecasted New Intake	Forecasted Total
Casella Westfield MA		
Cake Sludge		
Total Tons: 457.40	0	457
Total Samples for Casella Westfield MA: 19		
Casella Yorktown Heights		
Cake Sludge		
Total Tons: 42.24	0	42
Total Samples for Casella Yorktown Heights: 4		
Chatfield		
Septage		
Total Gallons: 4,800	0	4,800
Total Samples for Chatfield: 6		
East Coast Septic		
Septage		
Total Gallons: 104,000	0	104,000
Total Samples for East Coast Septic: 26		
Grieger Excavating		
Septage		
Total Gallons: 20,000	0	20,000
Total Samples for Grieger Excavating: 8		
Heritage Village Water		
Liquid Sludge		
Total Gallons: 32,500	0	32,500
Total Samples for Heritage Village Water: 5		
HI Stone Septic		
Septage		
Total Gallons: 25,800	0	25,800
Total Samples for HI Stone Septic: 4		
Kososki Septic		
Septage		
Total Gallons: 74,250	0	74,200
Total Samples for Kososki Septic: 25		
Litchfield		
Liquid Sludge		
Total Gallons: 110,500	0	110,500
Total Samples for Litchfield: 17		
Lynnwood Place		
Septage		
Total Gallons: 32,500	0	32,500
Total Samples for Lynnwood Place: 5		
Mahopac Septic		
Liquid Sludge		
Total Gallons: 781,000	0	781,000
Total Samples for Mahopac Septic: 130		
New Engl[illegible]tic		

Total Gallons: 54,000

Total Samples for New England Septic: 18	0	54,000

New Hartford

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 39,000		
Total Samples for New Hartford : 6	0	39,000

New Rochelle

Cake Sludge	Forecasted New Intake	Forecasted Total
Total Tons: 1,819.31		
Total Samples for New Rochelle: 78	0	1,819

Oxbury Sanitation

Septage	Forecasted New Intake	Forecasted Total
Total Gallons: 35,500		
Total Samples for Oxbury Sanitation: 12	0	35,500

Pawling

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 26,000		
Total Samples for Pawling: 4	0	26,000

Plymouth

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 136,500		
Total Samples for Plymouth: 21	0	136,500

Prospect Sanitation

Septage	Forecasted New Intake	Forecasted Total
Total Gallons: 12,500		
Total Samples for Prospect Sanitation: 5	0	12,500

Rhinebeck

Cake Sludge	Forecasted New Intake	Forecasted Total
Total Tons: 10.56		
Total Samples for Rhinebeck: 1	0	11

Shelton Septic

Septage	Forecasted New Intake	Forecasted Total
Total Gallons: 4,000		
Total Samples for Shelton Septic: 2	0	4,000

Stratford

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 877,500		
Total Samples for Stratford: 135	0	877,500

Superior Sanitation

Septage	Forecasted New Intake	Forecasted Total
Total Gallons: 12,500		
Total Samples for Superior Sanitation: 7	0	12,500

Synagro

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 845,000		
Total Samples for Synagro: 130	0	845,000

Talarico Septic

	Forecasted New Intake	Forecasted Total

P14

	Forecasted New Intake	Forecasted Total
Septage		
Total Gallons: 87,000		
Total Samples for Talarico Septic: 22	0	87,000
Thomaston		
Liquid Sludge		
Total Gallons: 45,500		
Total Samples for Thomaston: 7	0	45,500
Torrington		
Liquid Sludge		
Total Gallons: 357,500		
Total Samples for Torrington: 55	0	357,500
Veolia Bedford Hills		
Liquid Sludge		
Total Gallons: 13,000		
Total Samples for Veolia Bedford Hills: 2	0	13,000
Veolia Cranston		
Cake Sludge		
Total Tons: 174.85		
Total Samples for Veolia Cranston: 9	0	175
Veolia Danbury		
Cake Sludge		
Total Tons: 23.62		
Total Samples for Veolia Danbury: 1	0	24
Veolia IBM Southbury		
Liquid Sludge		
Total Gallons: 6,500		
Total Samples for Veolia IBM Southbury: 1	0	6,500
Veolia North Haven		
Liquid Sludge		
Total Gallons: 84,500		
Total Samples for Veolia North Haven: 13	0	84,500
Veolia Pepsi		
Liquid Sludge		
Total Gallons: 6,500		
Total Samples for Veolia Pepsi: 1	0	6,500
Veolia Poughkeepsie		
Liquid Sludge		
Total Gallons: 357,500		
Total Samples for Veolia Poughkeepsie: 55	0	357,500
Veolia Redding		
Liquid Sludge		
Total Gallons: 13,000		
Total Samples for Veolia Redding: 2	0	13,000
Veolia Seymour		
Cake Sludge Printed: 4/8/2014 10:32:36 AM		
Total Tons: 135.05		
Total Samples for Veolia Seymour: 17	0	135

Industrial Waste Water	Forecasted New Intake	Forecasted Total
Total Gallons: [illegible]0		
Total Sampl[illegible] S Americas Styrenics : 2	0	11,600

WeCare Organics

Cake Sludge	Forecasted New Intake	Forecasted Total
Total Tons: 297.87		
Total Samples for WeCare Organics: 17	0	298

Westport

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 91,000		
Total Samples for Westport: 14	0	91,000

Windham

Liquid Sludge	Forecasted New Intake	Forecasted Total
Total Gallons: 240,500		
Total Samples for Windham: 37	0	240,500

Total Gallons for all Customers 3/1/2014 - 3/31/2014: 4,963,400		
Total Tons for all Customers 3/1/2014 - 3/31/2014: 5,954.54	0	4,963,400
Total Samples for all Customers 3/1/2014 - 3/31/2014: 1139	0	5,955

Printed: 4/8/2014 10:32:36 AM

Nutrient Analysis Report

For compliance with General Permit for Nitrogen Discharges

Facility Name: NAUGATUCK TREATMENT Co.
Permit Number: CT0100641

Month: Mar-14
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.	3/3/2014	4.83	1.54	3.84	5.4	218
NAUGATUCK TRE.	3/4/2014	5	1.76	2.17	3.9	163
NAUGATUCK TRE.	3/5/2014	5.2	2.23	4.58	6.8	295
NAUGATUCK TRE.	3/10/2014	5.6	2.1	3.86	6	280
NAUGATUCK TRE.	3/11/2014	5.3	2.09	4.38	6.5	287
NAUGATUCK TRE.	3/12/2014	7.1	1.95	3.89	5.8	343
NAUGATUCK TRE.	3/17/2014	6.2	1.79	4.04	5.8	300
NAUGATUCK TRE.	3/18/2014	5.9	1.9	4.44	6.3	310
NAUGATUCK TRE.	3/19/2014	6.5	2.04	3.31	5.4	293
NAUGATUCK TRE.	3/24/2014	5.9	1.73	2.41	4.1	202
NAUGATUCK TRE.	3/25/2014	6.2	1.91	2.86	4.8	248
NAUGATUCK TRE.	3/26/2014	6.4	1.87	3.2	5.1	272
NAUGATUCK TRE.	3/31/2014	10.9	5.01	1.52	6.5	591
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					0	0
					Total Pounds	3802
					Average Pounds	292.4615385

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 4-9-14 JBsent

DMR Copy of Record

Permit

Permit #: CT0100641

Major: Yes

Permitted Feature: 001
External Outfall

Permittee: NAUGATUCK WPCF

Permittee Address: 500 CHERRY STREET
NAUGATUCK, CT 06770

Discharge: 001-1
SANITARY SEWAGE

Facility: NAUGATUCK, BOROUGH OF

Facility Location: 500 CHERRY STREET
NAUGATUCK, CT 06770

Report Dates & Status

Monitoring Period: From 03/01/14 to 03/31/14

DMR Due Date: 04/15/14

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: --

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										=	70	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						=	7.5					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						=	6.0			=	6.8	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	=	7	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								=	177			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										=	6.6	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	=	207			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								=	0.5	=	3.8	19 - mg/L		12/30 - Twelve Per Month	CP - COMPOS

Sent electronically 4-9-14 - J Batorski

00610 Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	–	Permit Req.							≤	25 MO AVG		Req Mon DAILY MX	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Value NODI													
				Sample													
00615 Nitrogen, nitrite total [as N]	1 - Effluent Gross	0	–	Permit Req.									=	0.15	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample													
00620 Nitrogen, nitrate total [as N]	1 - Effluent Gross	0	–	Permit Req.									=	4.6	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample													
00625 Nitrogen, Kjeldahl, total [as N]	1 - Effluent Gross	0	–	Permit Req.									=	5	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample													
00665 Phosphorus, total [as P]	1 - Effluent Gross	0	–	Permit Req.									=	10.2	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample													
01002 Arsenic, total [as As]	S - See Comments	0	–	Permit Req.									=	1.3	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI										Opt Mon INST MAX	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Sample													
01012 Beryllium, total [as Be]	S - See Comments	0	–	Permit Req.									<	0.4	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI										Opt Mon INST MAX	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Sample													
01027 Cadmium, total [as Cd]	1 - Effluent Gross	0	–	Permit Req.									<	0.0002	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample	=	0.31	=	0.36	01 - kg/d								
01042 Copper, total [as Cu]	1 - Effluent Gross	0	–	Permit Req.	≤	1.4 MO AVG	≤	2.68 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
				Value NODI												01/07 - Weekly	CP - COMPOS
				Sample													
01077 Silver, total [as Ag]	1 - Effluent Gross	0	–	Permit Req.									<	0.001	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample	=	1.9	=	2.19	01 - kg/d								
01092 Zinc, total [as Zn]	1 - Effluent Gross	0	–	Permit Req.	≤	4.85 MO AVG	≤	11.11 DAILY MX	01 - kg/d							01/07 - Weekly	CP - COMPOS
				Value NODI												01/07 - Weekly	CP - COMPOS
				Sample	=	0.3			03 - MGD								
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												99/99 - Continuous	TM - TOTALZ
				Sample													
70507 Phosphorous, in total orthophosphate	1 - Effluent Gross	0	–	Permit Req.									<	0.62	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Value NODI										Req Mon DAILY MX	19 - mg/L	01/30 - Monthly	CP - COMPOS
				Sample													
78407 Zinc, dry weight	S - See Comments	0	–	Permit Req.									=	430	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI										Opt Mon INST MAX	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
																01/60 - Once Every 2	

78408 Lead, dry weight	S - See Comments	0	–	Sample							=	'29	.09 - mg/kg	Months	GR - GRAB
				Permit Req.								Opt Mon INST MAX	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
78409 Nickel, dry weight	S - See Comments	0	–	Sample							=	'20	60 - 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
				Value NODI											
78471 Mercury, dry weight	S - See Comments	0	–	Sample							=	0.43	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.								Opt Mon INST MAX	00 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
78473 Chromium, dry weight	S - See Comments	0	–	Sample							=	26	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.								Opt Mon INST MAX	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
78475 Copper, sludge, tot, dry weight (as Cu)	S - See Comments	0	–	Sample							=	507	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.								Opt Mon INST MAX	00 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
78476 Cadmium, sludge, tot dry weight (as Cd)	S - See Comments	0	–	Sample							=	1.06	09 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Permit Req.								Opt Mon INST MAX	00 - mg/kg	01/60 - Once Every 2 Months	GR - GRAB
				Value NODI											
80120 BOD, carbonaceous, 5 day, 5 C	1 - Effluent Gross	0	–	Sample					=	4	=	4	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Permit Req.					<=	25 MO AVG	<=	40 DAILY MX	19 - mg/L	12/30 - Twelve Per Month	CP - COMPOS
				Value NODI											
80120 BOD, carbonaceous, 5 day, 5 C	G - Raw Sewage Influent	0	–	Sample					=	125			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											
81011 Solids, suspended percent removal	K - Percent Removal	0	–	Sample	=	97							23 - %	01/30 - Monthly	CA - CALCTD
				Permit Req.	>=	85 MN % RMV							23 - %	01/30 - Monthly	CA - CALCTD
				Value NODI											
81383 Carbonaceous oxygen demand, % removal	K - Percent Removal	0	–	Sample	=	97							23 - %	01/30 - Monthly	CA - CALCTD
				Permit Req.	>=	85 MN % RMV							23 - %	01/30 - Monthly	CA - CALCTD
				Value NODI											
TGA3D Pass/Fail Static 48Hr Acute D. Pulex	T - See Comments	1	–	Sample											
				Permit Req.						Opt Mon AVERAGE			9A - pass=0/fail=1	01/90 - Quarterly	CP - COMPOS
				Value NODI						9 - Conditional Monitoring - Not Required This Period					
TGA6C Pass/Fail Static 48Hr Acute Pimephales	T - See Comments	1	–	Sample											
				Permit Req.						Opt Mon AVERAGE			9A - pass=0/fail=1	01/90 - Quarterly	CP - COMPOS
				Value NODI						9 - Conditional Monitoring - Not Required This Period					

Submission Note

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

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

NAUGATUCK WPCF

VEOLIA
WATER

Sent via certified mail on March 28, 2014: Receipt # 7009 2820 0004 1018 0897

March 28, 2014

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

Subject: First Quarter 2014 CEM Cylinder Gas & Opacity Report

Dear Mr. Degirolamo:

Enclosed please find enclosed a copy of the *Cylinder Gas/Opacity Audits* for the first quarter of 2014. All data is within acceptable ranges.

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

Sincerely,

Veolia Water North America-Northeast, LLC

John Batorski
Project Manager

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

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

Test Report – CEMS Cylinder Gas & Opacity Audit First Quarter 2014

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

PREPARED FOR:	Veolia Water 500 Cherry Street Naugatuck, Connecticut 06770
CONCERNING:	Cylinder Gas Audit (CGA) and Opacity Audit Fluidized Bed Incinerator 500 Cherry Street Naugatuck, Connecticut 06770
PREPARED BY:	CK Environmental, Inc. 1020 Turnpike Street, Suite # 8 Canton, MA 02021

CK Project No. 4613

March 25, 2014

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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REPORT REVIEW CERTIFICATION

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

Prepared by: _____
Joseph Duggan / Project Manager

Reviewed by: _____
Michael Unterweger / Project Manager

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TEST SUMMARY

Facility Name:	**Veolia Water North America – Northeast, LLC** 500 Cherry Street Naugatuck, Connecticut
Facility Contact:	**Veolia Water NA – Northeast, LLC** John Batorski / Plant Manager Tel. No. 203-723-1433 Email: john.batorski@veoliawaterna.com
Regulatory Agency: Contact:	**State of Connecticut** **Department of Energy and Environmental Protection** John Degirolamo / Air Pollution Control Engineer Tel. No. 203-424-3562
Testing Organization:	**CK Environmental, Inc.** 1020 Turnpike Street, Suite 8 Canton, Massachusetts 02021
Project Manager:	Mr. Michael Unterweger / Project Manager Tel. No. 781-828-5200 Email: munterweger@cke.us
Test Personnel:	Mr. Michael Unterweger / Project Engineer
Unit Tested:	Sludge Incinerator Exhaust Stack
Test Date:	March 14, 2014
Report Date:	March 25, 2014

1.0 INTRODUCTION

1.1 Summary of Test Program

CK Environmental, Inc. (CK) was contracted by Veolia Water North America to conduct a cylinder gas audit (CGA) and an opacity audit on the Continuous Emissions Monitoring System (CEMS) which monitors the emissions at the Fluidized Bed Incinerator located in Naugatuck, Connecticut. The CEMS/COMS monitor the emissions of oxygen, carbon monoxide and opacity from the incinerator operated at this facility. Auditing of the CEMS/COMS was conducted on March 14, 2014.

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

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

1.2 Key Personnel

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

Table 1-1
Key Personnel

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

2.0 PLANT AND SAMPLING SYSTEM DESCRIPTION

2.1 Process Description and Operation

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

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

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

2.2 Continuous Emission Monitoring System

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

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

The moisture removal systems continuously remove moisture from the sample gas while maintaining minimal contact between the condensate and the sample gas. The M&C Tech Group Model ECS

thermoelectric gas sample chiller contains two (2) glass heat exchangers that are continuously drained of condensate by a dual head peristaltic pump. Temperature of the chiller is regulated and set to maintain a temperature of 40 °F.

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

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

Table 2-1
CEMS Specifications

Parameter	Manufacturer	Model	Serial No.	Range
O2, Dry	Siemens	Oxymat 6E	7MB20211 EAOOOAA 1	0-25%
CO	Thermo Environmental	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 CTDEP requirements as provided in the Facilities Title V permit.

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

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

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3.0 SUMMARY OF RESULTS

3.1 Objectives

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

3.2 Field Test Changes

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

3.3 Presentation of Results

A CGA was conducted on the outlet CEMS installed on the incinerator operated at this facility to document the CEMS RA for the first quarter 2014. The CEMS oxygen and carbon monoxide CGA and opacity audits were conducted on March 14, 2014.

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

The opacity audit was performed by alternately passing three filters of differing optical density (≈ 10%, 20% and 35%) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

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

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 Cylinder Gas Audit Procedure

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

4.2 Opacity Audit Procedure

The opacity audit was performed by alternately passing three filters of different known opacity values (9.83, 20.23, and 32.44) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

5.0 CK's QUALITY ASSURANCE PROCEDURES

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

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

5.1 Sampling

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

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

5.2 Reporting

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

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TABLES

Table 3.1 Summary of Results
Cylinder Gas Audit
FB Incinerator
Veolia Water NA - Naugatuck, CT
Naugatuck, Connecticut
1st Qtr - 2014

CEMS	Test Date	Monitor	Span / Units	Cylinder Gas Audit				
				Standard Conc.	Average Response	Error (% of std.conc.)	Error (abs. diff.)	CGA Criteria
Oxygen	03/14/14	Siemans	0-25%	5.46	5.40	1.10	0.06	15.0% or 0.5% O_2
				10.00	9.80	2.00	0.20	15.0% or 0.5% O_2
Carbon Monoxide	03/14/14	TECO	0-300 ppm	73.40	65.20	11.17	8.20	15.0% or 5 ppm
				169.10	170.33	0.73	1.23	15.0% or 5 ppm

Table 3.2 Summary of Results

OPACITY AUDIT CALCULATION SHEET

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

DATE: 3/14/14
AUDITOR: MU

Run #	Zero	Low	Mid	High
1	0.06	7.02	15.26	25.53
2	0.04	6.99	15.29	25.54
3	0.04	7.12	15.29	25.44
4	0.04	6.97	15.36	25.38
5	0.04	7.09	15.39	25.70
6 Min Avg	0.04	7.01	15.08	25.53

	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	**7.0**	**7.1**	**0.4**	**0.1**
2	**7.0**	**7.1**	**-0.1**	**0.0**
3	**7.1**	**7.1**	**0.0**	**0.0**
4	**7.0**	**7.1**	**-0.2**	**0.0**
5	**7.1**	**7.1**	**0.0**	**0.0**
Sum =			0.1	0.2
A = Sum (Delta L) ^ 2 =			0.0	
B = Sum (Delta L ^ 2) =			0.2	
N =			5.0	
(N * B) - A =			0.9	

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

ME = **0.0**

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

CI = **0.3**

Calibration Error = ABS (ME) + CI

Calibration Error (1) = **0.3**

6 Minute Average Mean Error = **-0.1**

N	Mid	Value	Delta L	Del L^2
1	**15.3**	**14.9**	**0.4**	**0.1**
2	**15.3**	**14.9**	**0.4**	**0.1**
3	**15.3**	**14.9**	**0.4**	**0.1**
4	**15.4**	**14.9**	**0.5**	**0.2**
5	**15.4**	**14.9**	**0.5**	**0.2**
Sum =			2.1	0.9
A = Sum (Delta L) ^ 2 =			4.3	
B = Sum (Delta L ^ 2) =			0.9	
N =			5.0	
(N * B) - A =			0.1	

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

ME = **0.4**

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

CI = **0.1**

Calibration Error = ABS (ME) + CI

Calibration Error(1) = **0.5**

6 Minute Average Mean Error = **0.2**

N	High	Value	Delta L	Del L^2
1	**25.5**	**24.4**	**1.1**	**1.2**
2	**25.5**	**24.4**	**1.1**	**1.3**
3	**25.4**	**24.4**	**1.0**	**1.0**
4	**25.4**	**24.4**	**1.0**	**0.9**
5	**25.7**	**24.4**	**1.3**	**1.6**
Sum =			5.5	6.1
A = Sum (Delta L) ^ 2 =			30.1	
B = Sum (Delta L ^ 2) =			6.1	
N =			5.0	
(N * B) - A =			0.3	

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

ME = **1.1**

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

CI = **0.2**

Calibration Error = ABS (ME) + CI

Calibration Error (1) = **1.2**

6 Minute Average Mean Error = **1.1**

(1) - Corrected Filter Value = 1-(1-Actual Filter Value)^{PLCF}

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

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Notice of Proposed Value of an Equivalent Nitrogen Credit for 2013

To: Connecticut Municipalities with Sewage Treatment Facilities

From: Macky McCleary , Deputy Commissioner Department of Energy and Environmental Protection
Betsey Wingfield, Chair, Nitrogen Credit Advisory Board

The Connecticut Department of Energy and Environmental Protection, working with the Nitrogen Credit Advisory Board, have established a Nitrogen Credit Exchange Program and General Permit to comply with Sections 22a-521 through 22a-527 of the General Statutes of Connecticut (The Nitrogen Reduction Program in Connecticut for Long Island Sound).

Under the exchange program, the cost of a credit is calculated on an annual basis. Accordingly, pursuant to Section 22a-527(b), the Nitrogen Credit Advisory Board hereby gives notice that it proposes an annual value for an equivalent nitrogen credit of $5.61 for calendar year 2013. This value was derived, as specified in Section 22a-527(b), by dividing the total annual project cost for nitrogen removal projects at Connecticut sewage treatment facilities by the reduction in equivalent pounds of nitrogen achieved.

The Commissioner of the Department of Environmental Protection hereby issues a draft ruling accepting the Board's proposal of a value of $5.61 for an equivalent nitrogen credit in calendar year 2013. You have until April 15, 2014 to review the data. Please look over the data for your facility and if you have any questions or objections please contact Iliana Raffa at the number listed below.

Pursuant to Section 22a-527(c), the Commissioner's draft ruling shall become final if no municipality or group of municipalities petition for a review of the proposed value of an equivalent nitrogen credit within 15 business days after the issuance date of the Commissioner's draft ruling.

Enclosed with this notice is a table that lists the facilities that will be buying and selling nitrogen credits under this program for the year 2013. Should you have any questions please contact Ms. Iliana Raffa of the Department's Water Protection and Land Reuse Bureau at 860-424-3758 or email Ms. Raffa at iliana.raffa@ct.gov

Sincerely,

Betsey Wingfield
Chairman, Nitrogen Credit Advisory Board

Sincerely,

Macky McCleary,
Deputy Commissioner
Date

cc:
Timothy Dowding, Stamford
Thomas Tylor, Metropolitan District Commission
Brian Armet, Mattabassett District
Joseph Michelangelo, Fairfield
Astrid T. Hanzalek, Suffield
William Norton, West Haven
Guy P. Russo, Middletown
Kristin Writanen, Treasurer's Office

Long Island Sound Nutrient Reduction Program
DRAFT Credit Exchange Invoice - 2013

NAUGATUCK TREATMENT Co.	CT0100641

End-of-Pipe TN Discharged (lbs/day)

January	200
February	205
March	422
April	247
May	238
June	365
July	281
August	245
September	181
October	188
November	185
December	257
Annual Avg	251 (lbs/day)

Credit Exchange Calculation

a. Permit Limit		252.000
b. Annual Avg		251.000
c. E-Factor		0.600
d. Credits	(b - a) x c	-0.600
e. Cost / Credit		5.61
2010 Adjustment		
f. Annual Invoice *		-$1,229

* Credits(d) x Cost of Credit(e) x 365 days
(negative value indicates payment to municipality)

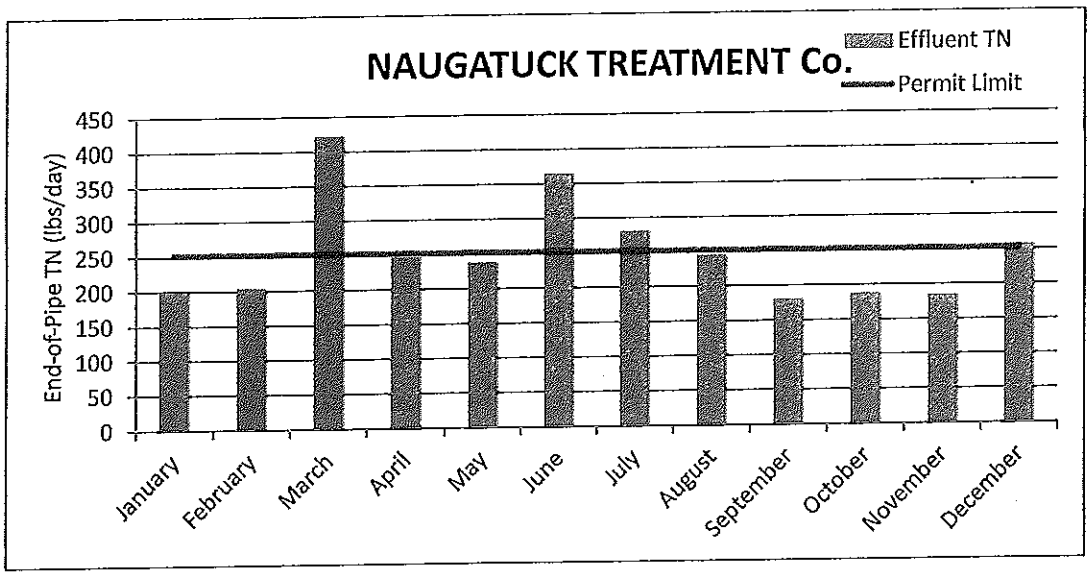
PLEASE SEND PAYMENTS TO:

State of Connecticut, Office of the Treasurer
6th Floor, 55 Elm Street
Hartford, CT 06106
Attn: Clean Water Fund Financial Administator

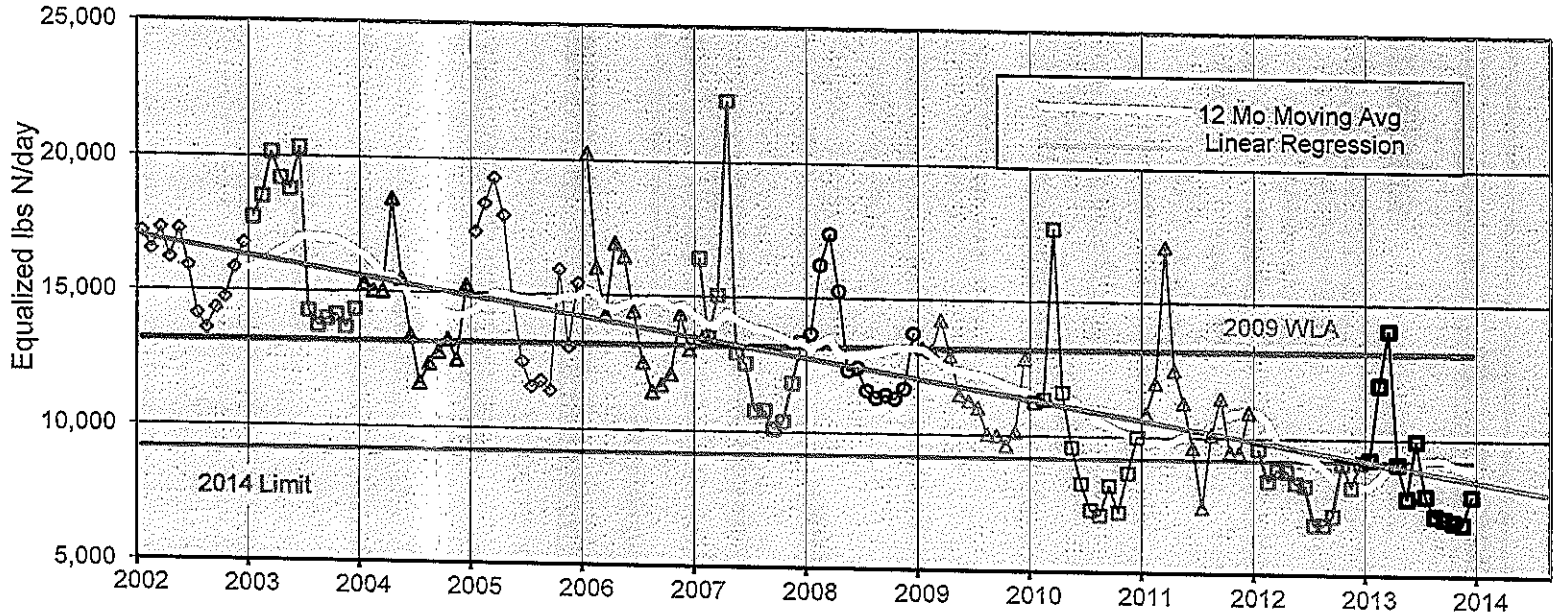
The Commissioner will purchase credits by August 14, 2012, in the amount of:

$1,229

Monthly Discharge of TN vs. 2013 Permit Limit



Monthly Average Total Equalized Nitrogen Loading to Long Island Sound
Projection to 2014



VEOLIA WATER

ODOR COMPLAINT REPORT

CALLER INFORMATION:

DATE: 3-1-14 TIME: 12:20PM. CALL TAKEN BY: [illegible]

NAME OF COMPLAINTANT: Robert Light PHONE NUMBER: 203-802-1251

ADDRESS / LOCATION WHERE ODOR IS BEING DETECTED: 489 Cherry St.

STRENGTH OF ODOR: FAINT (NOTICEABLE) DEFINATE STRONG OVERWHELMING

DESCRIPTION OF ODOR: AMMONIA DECAYED CABBAGE (FECAL) FISHY GALIC

MEDICINAL ROTTEN EGGS SKUNKY SOLVENT / FUEL OTHER

DOES THE CALLER WANT A FOLLOW-UP CALL? YES____ NO (✓)

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

ODOR INVESTIGATION:

WIND DIRECTION: ____ WIND STRENGTH: ____ (FROM ACCU WEATHER SCREEN)

WEATHER CONDITIONS: TEMP RAIN HUMID (DRY) UNSEASONABLY WARM (COLD)

COMPLETE PLANT SURVEY LISTING POSSIBLE SOURCES OF ODORS CONTRIBUTING TO THE COMPLAINT: Caller said it smelled like excrement - Pri. Scrubber was off for about 30 minutes for probe cleaning - Noticed smell after 11AM.

ODOR CONTROL EQUIPMENT STATUS:

PRIMARY SCRUBBER: ON (OFF) PH 4.26 ORP 562 MAKE UP WATER 2-3 GPM

VERIFY SYSTEM OVERFLOW: WC"

FILTER BLDG SCRUBBER: (ON) OFF PH ORP MAKE UP WATER 5-7 GPM

SPRAY CONE OK WC"

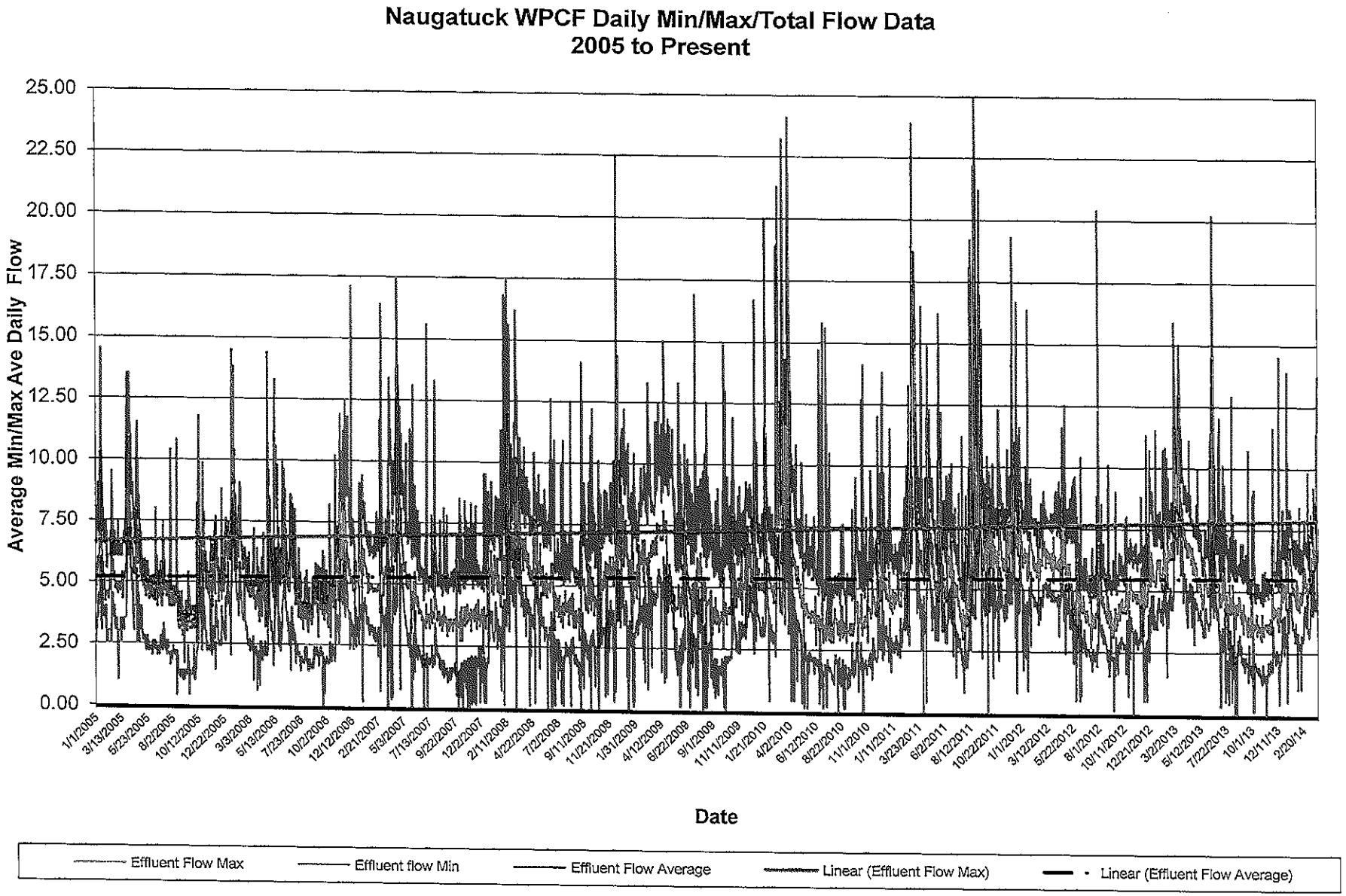
PERMANGANATE FEEDER: (ON) OFF VERIFIED OPERATIONAL: (YES) NO

ODOR COUNTERACTANT SYSTEM: ON (OFF) VERIFIED OPERATIONAL: YES NO

COMPLAINT REVIEWED BY: John Batoski DATE: 3-3-14 TIME: ~9AM

RETURN CALL MADE BY: DATE: TIME:

RETURN CALL RESULTS:


Naugatuck WPCF Daily Min/Max/Total Flow Data
2005 to Present
Average Min/Max Ave Daily Flow
25.00
22.50
20.00
17.50
15.00
12.50
10.00
7.50
5.00
2.50
0.00
1/1/2005
3/13/2005
5/23/2005
8/2/2005
10/12/2005
12/22/2005
3/3/2006
5/13/2006
7/23/2006
10/2/2006
12/12/2006
2/21/2007
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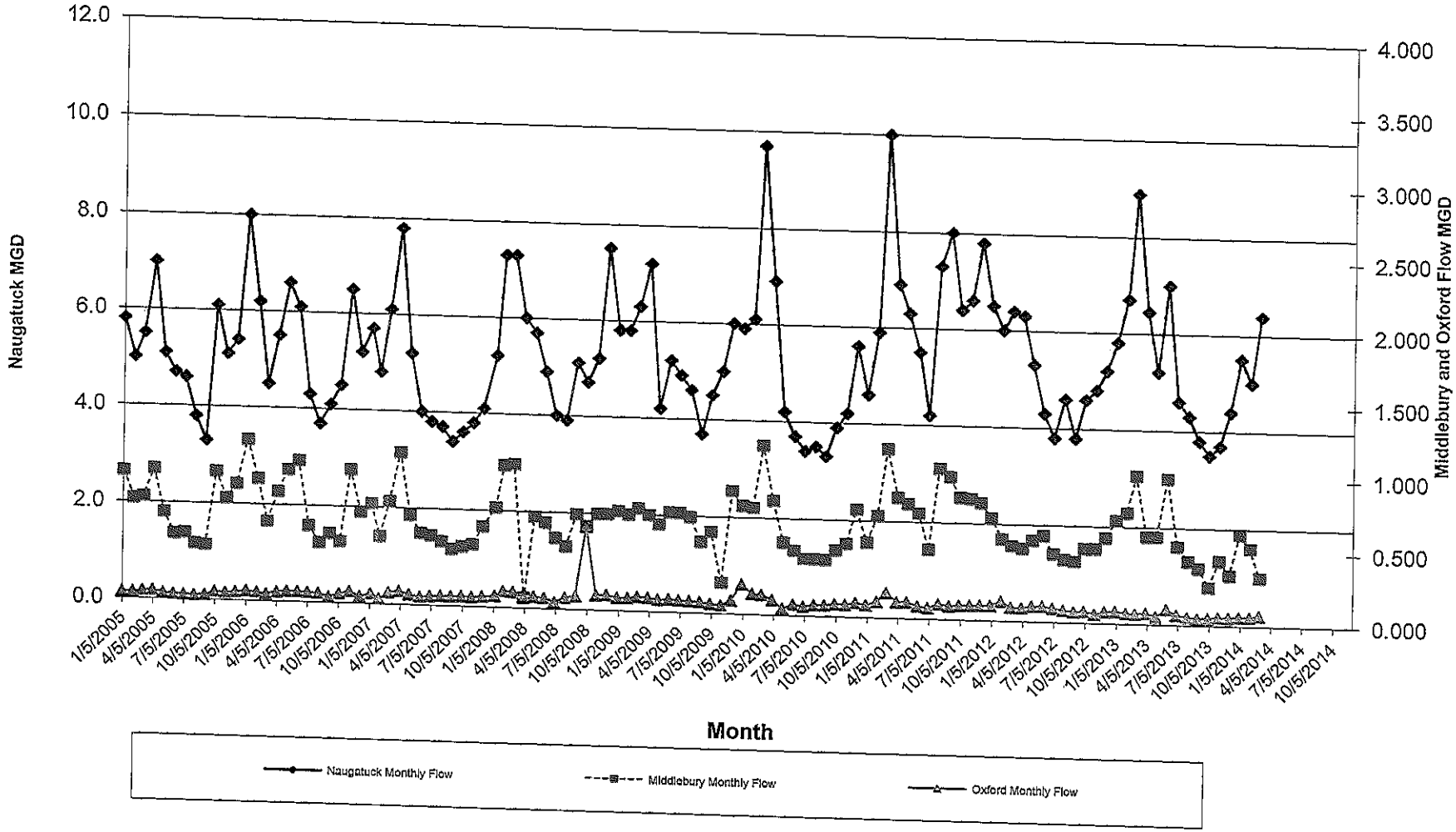
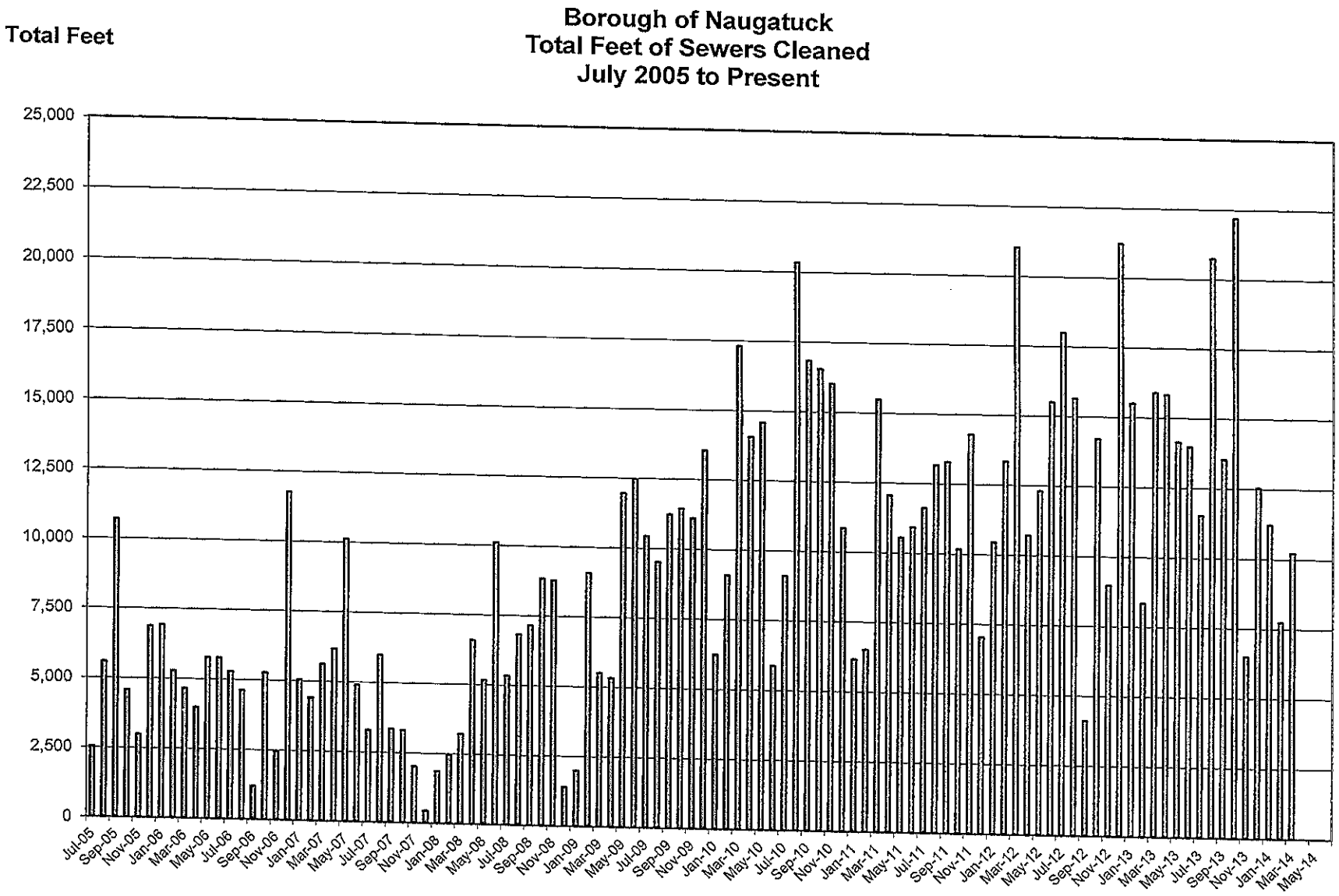
10/22/2011
1/1/2012
3/12/2012
5/22/2012
8/1/2012
10/11/2012
12/21/2012
3/2/2013
5/12/2013
7/22/2013
10/1/13
12/11/13
2/20/14
Date
Effluent Flow Max
Effluent flow Min
Effluent Flow Average
Linear (Effluent Flow Max)
Linear (Effluent Flow Average)

Naugatuck, Middlebury and Oxford
2005 to Present
Monthly Average Flows




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
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