Westchester gov.com

Robert P. Astorino
County Executive

Department of Environmental Facilities

Thomas J. Lauro, P.E.
Commissioner

October 8, 2015

Re: Westchester County Water District No. 1
CONSENT DECREE 13 Civ. 5475 (NSR)
Safe Drinking Water Act and Long Term 2 Enhanced Surface Water Treatment Rule
Monthly Operations Report – September 2015

To Whom Ever This May Concern:

Enclosed is the monthly operations reporting for Westchester County Water District No. 1 for September 2015. The quantity of water that failed to comply with the Enhanced Water Treatment Rule and the member Municipalities that received this water is summarized on Table 1.

I certify under penalty of law, pursuant to 28 U.S.C. §1746, 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 personal knowledge or my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such 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.

Sincerely,

Anthony Della Valle, P.E.
Director, Wastewater Treatment

AD:lal
Enclosure

Division of Solid Waste
Wastewater Treatment
Water Agency

270 North Avenue
New Rochelle, New York 10801 Telephone: (914) 813-5400 Fax: (914) 813-5460 Website: westchestergov.com

Westchester County Water District #1

LT2 Compliant water report 2015

Table 1

September	LT2 Compliant Water (Gallons)	Non Compliant Water (Gallons)
White Plains	0	249,798,000
Scarsdale	0	154,380,000
Yonkers	84,707,000	92,568,000
Mount Vernon	248,422,000	0
Monthly Total	333,129,000	496,746,000

rev. date: October 8, 2015

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

Water Systems Operation Report

Microbiological Sample Results

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
WWD #1 Kensico Dam	Sep-15	10/10/2015	☑ Surface ☐ Ground ☐ GWUDI
Public Water System ID	**County**	**Town, Village, or City**	☐ Purchase with subsequent chlorination
5903488	Westchester	Valhalla	☐ Purchase w/out subsequent chlorination

DATE	Source(s) in Use	Treated water volume (1,000 gallons/day)	Chlorination	Liquid Hypochlorite added to crock gallons	chlorine residual at entry point (mg/l)	Other Treatments / Readings: Caustic Gallons	Ortho Gallons	Treated turb	Raw turb.
1	Kensico	21250		343	1.63	240	125	0.42	0.44
2		21481		350	1.7	230	100	0.45	0.46
3		19838		338	1.67	235	108	0.48	0.44
4		19795		326	1.7	163	98	0.42	0.46
5		19003		313	1.6	213	96	0.48	0.49
6		23361		397	1.61	263	118	0.49	0.51
7		17956		301	1.56	203	80	0.46	0.49
8		18497		305	1.55	197	90	0.48	0.44
9		17620		310	1.57	210	95	0.47	0.48
10		15043		265	1.68	180	80	0.46	0.45
11		15885		270	1.62	182	78	0.43	0.45
12		14090		215	1.61	167	70	0.49	0.52
13		17948		295	1.68	211	82	0.42	0.4
14		16604		295	1.6	205	80	0.44	0.43
15		18340		295	1.6	210	90	0.45	0.46
16		19153		320	1.63	235	90	0.44	0.47
17		18440		280	1.68	215	90	0.45	0.48
18		18485		315	1.68	225	105	0.45	0.43
19		18111		285	1.63	215	90	0.45	0.46
20		18800		290	1.7	225	85	0.45	0.45
21		18039		300	1.67	220	90	0.43	0.46
22		19263		300	1.72	210	95	0.45	0.45
23		18381		300	1.55	220	85	0.43	0.46
24		17669		295	1.63	225	95	0.42	0.45
25		17833		273	1.67	224	146	0.42	0.46
26		17605		273	1.65	215	93	0.44	0.45
27		18101		284	1.7	222	95	0.45	0.47
28		14268		215	1.63	180	70	0.45	0.46
29		12042		210	1.57	145	75	0.48	0.48
30		10585		206	1.64	143	56	0.51	0.5
31									
Total		533486		8764		6228	2750		
AVG.		17783	#DIV/0!	292	1.64	208	92	0.45	0.46

Chlorine Mix Ratio = _____ quarts/gallons of _____ % chlorine added to _____ gallons of water in crock

Reported by M. Ferraro Title Sup of Water NYS DOH Operator Certification Number NY0032241

Signature M. [signature] Date 10/6/15 Operator Grade Level IB

Microbiological Samples and Free Chlorine Residual

Sample Location	Date of Sample	Sample Type 1 Routine 2 Repeat	Total Coliform Positive	E coli Positive	Free Chlorine Residual (mg/l)
Kensico Dam	9/1/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.63
	9/2/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.65
	9/3/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.75
	9/4/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.7
	9/7/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.58
	9/8/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.53
	9/9/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.6
	9/10/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.68
	9/11/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.65
	9/14/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.6
	9/15/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.65
	9/16/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.63
	9/17/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.68
	9/18/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.68
	9/21/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.67
	9/22/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.7
	9/23/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.55
	9/24/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.63

Population Served:

Number of microbiological monitoring samples required:

Number of microbiological monitoring samples taken:

Did an M&R violation oc ☐ Yes ☑ No

If "Yes," check reason (s) below

Actual number of samples is fewer than required

Did not collect/analyze repeat sample

Did not collect/analyze for E. coli for positive total coliform from routine/repeat sample.

Did an MCL violation occur? ☐ Yes ☑ No

If "Yes," check reason(s) below (see also Part 5, Table 6 for additional information)

For systems collecting less than 40 samples per month: two or more of the samples (routine and /or repeat) are positive for total coliform (= total coliform MCL violation).

For systems collecting 40 or more samples per month: more than 5% of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).

The original sample was E coli positive and at least 1 repeat sample was positive for total coliform (= E.coli MCL violation)

Reminder System must collect a minimum of five (5) routine microbiological monitoring samples during the month following a repeat sample collection

As required by 5-1.72, "Operation of a Public Water System," a copy of this form shall be sent to your local health department by the 10th calendar day of the next reporting period.

Sample Collector(s): Larry Dema, Fred McQuillan

Name of NYSDOH Certified Laboratory: WCDLR 10108

Did any MCL violation occur? If so, please describe:

Did an emergency or low pressure problem occur? Did source water bypass an existing treatment process in the system? If so, please explain.

Comments:

Microbiological Samples and Free Chlorine Residual

Sample Location	Date of Sample	Sample Type 1.Routine 2.Repeat	Total Coliform Positive	E.coli Positive	Free Chlorine Residual (mg/l)
Kensico Dam	9/25/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.7
	9/28/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.65
	9/29/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.6
	9/30/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.65
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	
			☐ Yes ☑ No	☐ Yes ☑ No	

Population Served:

Number of microbiological monitoring samples required:

Number of microbiological monitoring samples taken:

Did an M&R violation oc ☐ Yes ☑ No

If "Yes," check reason (s) below

- Actual number of samples is fewer than required
- Did not collect/analyze repeat sample
- Did not collect/analyze for E. coli for positive total coliform from routine/repeat sample

Did an MCL violation occur? ☐ Yes ☑ No

If "Yes," check reason(s) below (see also Part 5, Table 6 for additional information)

- For systems collecting less than 40 samples per month: two or more of the samples (routine and /or repeat) are positive for total coliform (= total coliform MCL violation).
- For systems collecting 40 or more samples per month: more than 5% of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).
- The original sample was E coli positive and at least 1 repeat sample was positive for total coliform (= E.coli MCL violation)

Reminder: System must collect a minimum of five (5) routine microbiological monitoring samples during the month following a repeat sample collection.

As required by 5-1.72, "Operation of a Public Water System," a copy of this form shall be sent to your local health department by the 10th calendar day of the next reporting period.

Sample Collector(s): Larry Dema, Fred McQuillan

Name of NYSDOH Certified Laboratory: WCDLR 10108

Did any MCL violation occur? If so, please describe:

Did an emergency or low pressure problem occur? Did source water bypass an existing treatment process in the system? If so, please explain.

Comments:

Entry Point Disinfection Monitoring, CT Value Calculations Unfiltered Surface Water Supplies

ENTRY POINT DISINFECTION MONITORING

DATE	Free Chlorine Residual Mg/l					
	0000	0400	0800	1200	1600	2000
1	1.68	1.69	1.70	1.72	1.68	1.75
2	1.72	1.68	1.66	1.62	1.65	1.72
3	1.70	1.60	1.67	1.50	1.60	1.70
4	1.61	1.61	1.57	1.40	1.55	1.57
5	1.60	1.62	1.66	1.57	1.61	1.62
6	1.70	1.66	1.60	1.70	1.65	1.60
7	1.53	1.54	1.55	1.50	1.52	1.52
8	1.50	1.58	1.59	1.53	1.57	1.58
9	1.66	1.69	1.68	1.65	1.67	1.68
10	1.68	1.66	1.70	1.65	1.63	1.70
11	1.78	1.79	1.74	1.60	1.80	1.81
12	1.89	1.78	1.77	1.66	1.70	1.70
13	1.75	1.71	1.70	1.67	1.69	1.70
14	1.68	1.67	1.69	1.80	1.68	1.70
15	1.67	1.65	1.67	1.45	1.68	1.70
16	1.62	1.75	1.73	1.72	1.67	1.72
17	1.55	1.78	1.70	1.60	1.72	1.72
18	1.67	1.68	1.68	1.68	1.63	1.68
19	1.67	1.61	1.65	1.62	1.60	1.69
20	1.65	1.68	1.55	1.63	1.68	1.70
21	1.72	1.70	1.72	1.65	1.68	1.75
22	1.68	1.65	1.65	1.62	1.65	1.72
23	1.73	1.69	1.68	1.67	1.67	1.70
24	1.65	1.60	1.30	1.65	1.70	1.65
25	1.70	1.70	1.69	1.69	1.68	1.71
26	1.73	1.68	1.22	2.25	1.72	1.75
27	1.69	1.70	1.70	1.67	1.70	1.75
28	1.68	1.72	1.67	1.69	1.66	1.70
29	1.62	1.65	1.65	1.85	1.70	1.70
30	1.70	1.95	2.20	1.20	1.60	1.70
31						

1. Minimum number of residual samples per day _____.

2. Record values every four hours if continuous monitoring required, or if residual falls below 0.2 mg/l, and notify state.

DOH-1014 (3/91) p. 2 of 2

CT VALUE COMPUTATION

DATE	Water pH	Water Temp. °C	(1) Free Chlorine Residual mg/l	(2) Contact Time, min	(3) CT Value mg. min/l	Reqd. CT Value mg. min/l
1	7.30	12.4	1.63			
2	7.25	12.5	1.70			
3	7.30	12.4	1.67			
4	7.25	11.8	1.70			
5	7.22	12.0	1.60			
6	7.23	12.0	1.60			
7	7.24	12.2	1.56			
8	7.23	12.6	1.53			
9	7.20	12.5	1.57			
10	7.23	12.4	1.68			
11	7.26	12.5	1.62			
12	7.25	12.4	1.60			
13	7.24	11.8	1.68			
14	7.26	12.2	1.60			
15	7.26	12.1	1.60			
16	7.26	12.3	1.63			
17	7.22	12.2	1.68			
18	7.26	12.4	1.68			
19	7.20	12.3	1.63			
20	7.27	12.5	1.70			
21	7.30	12.4	1.67			
22	7.30	12.3	1.72			
23	7.25	12.2	1.55			
24	7.28	12.2	1.63			
25	7.26	12.1	1.67			
26	7.30	12.0	1.65			
27	7.31	12.1	1.70			
28	7.32	12.1	1.63			
29	7.25	12.1	1.57			
30	7.22	12.1	1.64			
31						

1. Parameters used in determining CT values ar taken at the first user at peak hourly flow condition

2. CT value equals product free chlorine residual in m (1), and contact time in minutes (2). (1) x (2) = (3)

3. If multiple chlorination points are utilized for CT evaluation, additional sheets should be attached

Reported by M. Ferraro

Date 10/06/15

Title Sup. of Water

Signature M. F

Cert. No. NY 0050241

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Public Water Supply Protection

Water Systems Operation Repor

UNFILTERED SURFACE WATER SYSTEM

Instructions: Complete form and submit to your local health unit within 10 days of the close of the reporting month.

NAME OF PUBLIC WATER SYSTEM	PROGRAM CODE	STATION (NUMBER)	REPORTING MONTH/YEAR
WESTCHESTER COUNTY WATER DISTRICT NO 1	1 0 0	0 5 9 0 3 4 8 8	

Location _____ (C,V,T) County WESTCHESTER

RAW WATER TURBIDITY

DATE	0000	0400	0800	1200	1600	2000
1	.40	.42	.44	.40	.43	.45
2	.43	.44	.46	.41	.50	.55
3	.42	.44	.46	.39	.45	.40
4	.44	.45	.44	.43	.45	.45
5	.45	.45	.47	.44	.47	.46
6	.48	.45	.48	.45	.48	.48
7	.48	.45	.46	.48	.41	.48
8	.46	.47	.49	.45	.50	.50
9	.47	.50	.50	.46	.46	.48
10	.46	.45	.43	.42	.43	.47
11	.42	.38	.36	.38	.46	.50
12	.48	.47	.45	.38	.43	.41
13	.44	.45	.45	.41	.44	.47
14	.43	.38	.37	.36	.43	.45
15	.43	.44	.40	.37	.44	.45
16	.43	.42	.42	.41	.43	.45
17	.48	.49	.45	.40	.44	.47
18	.43	.44	.44	.45	.43	.45
19	.43	.43	.44	.43	.45	.44
20	.40	.40	.42	.41	.46	.45
21	.43	.44	.45	.43	.43	.45
22	.43	.43	.43	.40	.43	.44
23	.42	.44	.44	.42	.43	.44
24	.42	.40	.42	.42	.43	.45
25	.42	.42	.40	.44	.42	.44
26	.42	.42	.38	.39	.43	.44
27	.42	.41	.42	.42	.44	.45
28	.43	.42	.43	.42	.45	.51
29	.47	.46	.39	.38	.46	.53
30	0.50	.40	.40	.40	.45	.50
31						

RAW WATER

DATE	Total Coliform per 100 ml, Colonies	Fecal Coliform per 100 ml, Colonies
1	<1.8	<1.8
2		
3	1.8	<1.8
4	<1.8	<1.8
5	—	—
6	—	—
7	<1.8	<1.8
8	4.5	<1.8
9	<1.8	<1.8
10	21	<1.8
11	7.8	4.5
12	—	—
13	—	—
14	4.5	<1.8
15	4.5	<1.8
16	4.0	<1.8
17	13	<1.8
18	2.0	<1.8
19	—	—
20	—	—
21	4.0	<1.8
22	4.5	<1.8
23	6.8	<1.8
24	7.8	<1.8
25	21	<1.8
26	—	—
27	—	—
28	7.8	2.0
29	2.0	<1.8
30	2.0	<1.8
31		

1. Record raw water turbidity values every four hours.
2. Notify state by the end of the next business day whenever the raw water turbidity exceeds 5 NTU.
3. Population served _____.
4. Minimum number of microbiological samples required per week _____.
5. A daily microbiological sample is required every day the raw water turbidity exceeds 1 NTU.

(OVER)

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

Water Systems Operation Report

Microbiological Sample Results

Public Water System Name	Reporting Month/Year	Date Report Submitted	Source Water Type(s)
WWD #1 Shaft 22	Sep-15	10/10/2015	☑ Surface ☐ Ground ☐ GWUDI
Public Water System ID	**County**	**Town, Village, or City**	☐ Purchase with subsequent chlorination
5903488	Westchester	Yonkers	☐ Purchase w/out subsequent chlorination

DATE	Source(s) in Use	Treated water volume (1,000 gallons/day)	[redacted]	Chlorination: Calcium Hypo as #	Chlorination: Free chlorine residual at entry point	Other Treatments / Readings: Caustic Gallons	Ortho Gallons	Treated turb	PH
1	Del aq	12,200	[redacted]	110	1.65	315	115	0.79	7.54
2		13,400	[redacted]	165	1.6	310	110	0.8	7.52
3		13,012	[redacted]	110	1.68	352	120	0.82	7.52
4		10,565	[redacted]	165	1.6	253	92	0.88	7.4
5		11,450	[redacted]	165	1.58	299	113	0.76	7.47
6		13,923	[redacted]	110	1.65	343	115	0.82	7.6
7		9,400	[redacted]	110	1.65	285	100	0.85	7.53
8		14,850	[redacted]	110	1.58	100	30	0.87	7.53
9		12850	[redacted]	110	1.35	25	15	0.87	6.4
10		11050	[redacted]	110	1.45	25	15	0.89	7.54
11		10900	[redacted]	110	1.58	280	115	0.79	7.48
12		9750	[redacted]	110	1.6	300	110	0.82	7.53
13		11050	[redacted]	110	1.6	295	105	0.82	7.54
14		11300	[redacted]	110	1.5	310	105	0.83	7.52
15		11200	[redacted]	110	1.6	305	115	0.81	7.55
16		11615	[redacted]	110	1.45	320	100	0.81	7.52
17		11685	[redacted]	110	1.61	305	100	0.8	7.52
18		12032	[redacted]	110	1.62	335	115	0.82	7.52
19		11484	[redacted]	165	1.6	315	115	0.85	7.32
20		10884	[redacted]	110	1.6	275	100	0.88	7.4
21		12000	[redacted]	110	1.6	325	110	0.74	7.55
22		10200	[redacted]	165	1.5	260	105	0.9	7.5
23		12000	[redacted]	110	1.55	310	100	0.81	7.55
24		11010	[redacted]	110	1.55	291	106	0.83	7.54
25		11325	[redacted]	110	1.5	285	89	0.8	7.52
26		10952	[redacted]	110	1.57	282	90	0.79	7.5
27		11613	[redacted]	110	1.63	268	85	0.8	7.6
28		12800	[redacted]	165	1.77	205	55	0.78	7.54
29		13359	[redacted]	110	1.57	360	79	0.89	7.44
30		12941	[redacted]	110	1.67	340	66	0.74	7.37
31			[redacted]						
Total		352,800	[redacted]	3630		8273	2790		
AVG.		11760	[redacted]	121	1.58	276	93	0.82	7.47

Chlorine Mix Ratio = _____ quarts/gallons of _____ % chlorine added _____ gallons of water in crock

Reported by [illegible] Title Sup of Water NYS DOH Operator Certification Number N-10032241

Signature [illegible] Date 10/6/15 Operator Grade Level IB

Microbiological Samples and Free Chlorine Residual

Sample Location	Date of Sample	Sample Type 1.Routine	Total Coliform Positive	E coli Positive	Free Chlorine Residual (mg/l)
Shaft-22	9/1/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.56
	9/3/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.68
	9/7/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.55
	9/11/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.55
	9/14/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.6
	9/16/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.54
	9/21/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.54
	9/24/2015	1	☐ Yes ☑ No	☐ Yes ☑ No	1.58
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	
			☐ Yes ☐ No	☐ Yes ☐ No	

Population Served:

Number of microbiological monitoring samples required: 8

Number of microbiological monitoring samples taken: 8

Did an M&R violation oc ☐ Yes ☑ No

If "Yes," check reason (s) below

Actual number of samples is fewer than required

Did not collect/analyze repeat sample

Did not collect/analyze for E. coli for positive total coliform from routine/repeat sample.

Did an MCL violation occur? ☐ Yes ☑ No

If "Yes," check reason(s) below (see also Part 5, Table 6 for additional information)

For systems collecting less than 40 samples per month, two or more of the samples (routine and /or repeat) are positive for total coliform (= total coliform MCL violation).

For systems collecting 40 or more samples per month, more than 5% of the samples (routine and/or repeat) are positive for total coliform (= total coliform MCL violation).

The original sample was E.coli positive and at least 1 repeat sample was positive for total coliform (= E.coli MCL violation).

Reminder: System must collect a minimum of five (5) routine microbiological monitoring samples during the month following a repeat sample collection

As required by 5-1.72, "Operation of a Public Water System," a copy of this form shall be sent to your local health department by the 10th calendar day of the next reporting period.

Sample Collector(s): Larry Dema

Name of NYSDOH Certified Laboratory: WCDLR-10108

Did any MCL violation occur? If so, please describe:

Did an emergency or low pressure problem occur? Did source water bypass an existing treatment process in the system? If so, please explain.

Comments: