

Lacey Municipal Utilities Authority

Response to NJDEP Notice of Non-Compliance

May 1, 2024

- **The LMUA received a Notice of Non- Compliance on March 27, 2024. The violation according to the state began in September of 2023. We were not notified until 6 months later.**
- **We were required to Mail out the Public Notice to our customers using the NJDEP's Mandatory language and we were not allowed to explain what had occurred.**
- **The violation was for not meeting the NJDEP's newly established Water Quality Parameters (PH Levels) in our distribution system for the July 1, 2023 – December 31, 2023 monitoring period.**
- **The optimum range for PH Levels had been 6.5 – 8.5 for greater than 30 years until it was recently changed to a range of 7.0 – 8.0.**
- **The NJDEP still lists the optimum PH range as 6.5 – 8.5 on their website to this day. (See exhibit A)**
- **The LMUA hired a Contracted Laboratory to collect the Water Quality Parameters samples for PH and Alkalinity in our distribution system. We hired them because LMUA was not equipped to perform Alkalinity testing in the Distribution System. The Lab collected the 20 required samples on 9/12/23 and 12/12/23 and some of them were less than 7.0 PH. The lowest level detected was 6.8.**
- **It is important to note that Contaminants were NOT detected in regards to this Notice of Non-Compliance.**
- **The LMUA measures PH levels at our Water Treatment Plants twice per day utilizing a PH Meter which is calibrated daily using PH buffer solutions 4,7,10. We also measure PH levels in our distribution system twice per month using a field PH probe which is calibrated before each use. The Lacey MUA tested for PH on the same day and many of the same locations (9/12/23 and 12/12/23) as the Contracted Laboratory and all of our results were in compliance with the new Water Quality Parameter PH range of 7.0-8.0. (See exhibit B and C)**

- **It is important to note that we are only required by NJDEP to take 20 PH samples every 6 months in our distribution system. The LMUA takes 30 samples each month or 180 samples every 6 months voluntarily to ensure that the drinking water is safe. We are taking 9 times the required samples.**
- **After reviewing the sample results that the Lacey MUA tested at our Water Treatment Plant and in our Distribution System, we are confident that we were always in compliance with the NJDEP's Water Quality Parameters (PH levels). We do not believe the results submitted by the Contracted Laboratory were accurate. We are requesting that NJDEP rescind the Notice of Non-Compliance based on the Lacey MUA's test Results.**
- **The safety of Lacey Township's Drinking water is Paramount and we do not take that responsibility lightly.**

EXHIBIT A

Federal and NJ State Primary and Secondary Drinking Water Standards as of June 2020

Volatile Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [$\mu\text{g/l}$ or ppb]
Benzene	1*
Carbon Tetrachloride	2*
1,2-Dichlorobenzene	600
1,3- Dichlorobenzene	600*
1,4- Dichlorobenzene	75
1,1-Dichloroethane	50*
1,2-Dichloroethane	2*
1,1-Dichloroethylene	2*
cis- 1,2-Dichloroethylene	70
trans- 1,2-Dichloroethylene	100
1,2-Dichloropropane	5
Ethylbenzene	700
Methyl tertiary Butyl Ether	70*
Methylene Chloride	3*
Monochlorobenzene	50*
Naphthalene	300*
Styrene	100
1, 1,2,2-Tetrachloroethane	1*
Tetrachloroethylene	1*
Toluene	1,000
1,2,4-Trichlorobenzene	9*
1,1,1-Trichloroethane	30*
1,1,2-Trichloroethane	3*
Trichloroethylene	1*
Vinyl Chloride	2
Xylenes [Total]	1,000*

Radionuclides

Contaminants	Maximum Contaminant Levels [MCL]
Combined radium 226/228	5 pCi/L
Gross alpha particles	15 pCi/L
Beta/photon emitters	4 mrem/year
Uranium	30 $\mu\text{g/L}$

Other Contaminants

Turbidity No more than 5% of the samples may exceed 0.3 NTU, nor any sample exceed 1 NTU.

Coliform bacteria standards are based on an MCL for E. coli, and uses E. coli and total coliforms to initiate a "find and fix" approach to address fecal contamination that could enter into the distribution system. It requires public water systems to perform assessments to identify sanitary defects and subsequently take action to correct them.

Inorganic Chemicals

Contaminants	Maximum Contaminant Levels [MCL] [$\mu\text{g/l}$ or ppb]
Antimony	6
Arsenic	5*
Asbestos	7×10^6 fibers/l >10 μm
Barium	2,000
Beryllium	4
Cadmium	5
Chromium	100
Copper	1,300**[AL]
Cyanide	200
Fluoride	4,000
Lead	15**[AL]
Mercury	2
Nickel	+
Nitrate [as nitrogen]	10,000
Nitrite	1,000
[combined nitrate/nitrite]	10,000
Selenium	50
Thallium	2

Disinfection Byproducts

Contaminants	Maximum Contaminant Levels [MCL] $\mu\text{g/L}$ or ppb (as running annual averages per group)
Dichlorobromomethane	80 (TTHM)
Chlorodibromomethane	80 (TTHM)
Bromofrom	80 (TTHM)
Chloroform	80 (TTHM)
Monochloroacetic acid	60 (HAA5)
Dichloroacetic acid	60 (HAA5)
Trichloroacetic acid	60 (HAA5)
Bromoacetic acid	60 (HAA5)
Dibromoacetic acid	60 (HAA5)
Bromate	10
Chlorite	1,000

TTHM- Trihalomethanes
HAA5- Haloacetic Acids

Bromate (only for treatment plants using ozone)

Chlorite (only for treatment plants using chlorine dioxide), requires daily/follow-up monitoring, not annual

For a detailed explanation of the Safe Drinking Water Program, refer to the Federal Safe Drinking Water Act regulations [40 CFR Parts 141, 142, 143] and the New Jersey Safe Drinking Water regulations [N.J.A.C. 7:10-1 et seq.].

Synthetic Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [$\mu\text{g/l}$ or ppb]
Alachlor	2
Aldicarb	+
Aldicarb Sulfone	+
Aldicarb Sulfoxide	+
Atrazine	3
Benzo[a]pyrene	0.2
Carbofuran	40
Chlordane	0.5*
Dalapon	200
Dibromochloropropane [DBCP]	0.2
Di[2-ethylhexyl]adipate	400
Di[2-ethylhexyl]phthalate	6
Dinoseb	7
Diquat	20
Endothall	100
Endrin	2
Ethylene dibromide [EDB]	0.05
Glyphosate	700
Heptachlor	0.4
Heptachlor Epoxide	0.2
Hexachlorobenzene	1
Hexachlorocyclopentadiene	50
Lindane	0.2
Methoxychlor	40
Oxamyl	200
PCBs	0.5
Pentachlorophenol	1
Perfluorononanoic acid (PFNA)	0.013*
Perfluorooctanoic acid (PFOA)	0.014*
Perfluorooctane sulfonic acid (PFOS)	0.013*
Picloram	500
Simazine	4
Toxaphene	3
2,3,7,8-TCDD [Dioxin]	3×10^{-5}
2,4-D	70
2,4,5-TP [Silvex]	50
1,2,3-Trichloropropane (1,2,3-TCP)	0.030*

Per- and polyfluoroalkyl substances (PFAS such as PFNA, PFOA & PFOS) are considered to be Synthetic Organic Compounds due to their chemical makeup, however, their regulatory framework follows that of Volatile Organic Compounds

Secondary Standards

Physical Characteristics	Recommended Upper Limit or Optimum Range
Color	10 color units (standard cobalt scale)
pH	6.5 to 8.5 (optimum range)
Odor	3 Threshold odor number
Taste	No objectionable taste

Chemical Characteristics	Recommended Upper Limit [mg/l or ppm]
ABS/L.A.S.	0.5
Aluminum	0.2
Chloride	250
Fluoride	2
Hardness (as CaCO_3)	250
Iron	0.3
Manganese	0.05
Silver	0.1
Sodium	50
Sulfate	250
Total Dissolved Solids (TDS)	500
Zinc	5

Key:

* N.J. MCL [A-280]

** An [AL] action level is not an MCL. It is a trigger point at which remedial action is to take place

+ No MCL - Monitoring Required

One milligram per liter [mg/l] = one part per million = one cent in \$10,000 or one second in 12 days.

One microgram per liter [$\mu\text{g/l}$] = one part per billion = one cent in \$10,000,000 or one second in 32 years.



New Jersey Department of Environmental Protection

Division of Water Supply and Geoscience

Bureau of Safe Drinking Water

Mail Code 401-04Q

P.O. Box 420

401 East State Street

Trenton, New Jersey 08625

Tel. # (609) 292-5550

EXHIBIT B

Water Plant # 2

PWSID: 1512001
POE / Facility ID#: TP003008

Water System Name: Lacey MUA Month / Year: Sep-23
Plant Name: Treatment Plant # 2 - Boox Street, Forked River, NJ 08731

Treatment Plant Classification: T 3

Treatment Capacity: Total: 2.88 MGD Firm: 2.88 MGD

All results in ppm or mg/l																	
PHYSICAL AND CHEMICAL ANALYSIS																	
Days	Chlorine Residual		Fluoride		Color		Turbidity		pH		Iron		Manganese		Alkalinity		Days
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
1	1.36	1.40							7.6	7.7	0.02	0.04	0.003	0.004			1
2	1.39	1.39							7.6	7.6	0.03	0.03	0.002	0.002			2
3	1.41	1.41							7.5	7.5	0.02	0.02	0.011	0.011			3
4	1.36	1.36							7.7	7.7	0.05	0.05	0.017	0.017			4
5	1.33	1.33							7.3	7.3	0.03	0.06	0.006	0.015			5
6	1.36	1.37							7.3	7.4	0.03	0.03	0.006	0.007			6
7	1.36	1.39							7.3	7.4	0.04	0.08	0.003	0.013			7
8	1.32	1.44							7.3	7.5	0.04	0.09	0.004	0.017			8
9	1.54	1.54							7.5	7.5	0.03	0.03	0.005	0.005			9
10	1.55	1.55							7.7	7.7	0.09	0.09	0.004	0.004			10
11	1.42	1.42							7.7	7.8	0.07	0.08	0.004	0.008			11
12	1.40	1.44							7.7	7.9	0.03	0.07	0.001	0.010			12
13	1.29	1.29							7.7	7.8	0.04	0.08	0.003	0.008			13
14	1.32	1.33							7.7	7.8	0.02	0.07	0.014	0.019			14
15	1.30	1.30							7.5	7.6	0.06	0.07	0.010	0.022			15
16	1.37	1.37							7.8	7.8	0.08	0.08	0.005	0.005			16
17	1.35	1.41							7.3	7.6	0.04	0.08	0.006	0.016			17
18	1.31	1.32							7.7	7.7	0.06	0.11	0.007	0.017			18
19	1.21	1.22							7.6	7.7	0.02	0.04	0.002	0.020			19
20	1.10	1.23							7.6	7.7	0.03	0.04	0.009	0.011			20
21	1.19	1.23							7.6	7.7	0.06	0.07	0.002	0.006			21
22	1.07	1.19							7.6	7.7	0.05	0.06	0.005	0.006			22
23	1.15	1.15							7.8	7.8	0.04	0.04	0.007	0.007			23
24	1.14	1.14							7.9	7.9	0.03	0.03	0.008	0.008			24
25	1.15	1.17							7.9	8.0	0.04	0.05	0.002	0.004			25
26	1.03	1.04							7.8	7.8	0.03	0.05	0.006	0.011			26
27	1.02	1.23							7.2	7.7	0.03	0.04	0.005	0.009			27
28	1.09	1.18							7.7	7.8	0.03	0.05	0.004	0.008			28
29	1.22	1.30							7.8	8.0	0.02	0.02	0.010	0.012			29
30	1.49	1.49							7.9	7.9	0.04	0.04	0.008	0.008			30
31																	31
Total																	Total
Ave.	1.29	1.32							7.6	7.7	0.04	0.06	0.006	0.010			Ave

Temperature: 55 °F

Remarks: (Include information on breakdowns, special problems e.t.c. during the month)

Licensed Operator: Edward A. Woolf

License Number: T3-0023163 Telephone No.: (609) 693-8188

I hereby certify the above to be correct

Signature: _____ Date: _____

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	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
1	1.27	1.29							7.5	7.5	0.04	0.04	0.004	0.006			1
2	1.35	1.35							7.5	7.5	0.07	0.07	0.004	0.004			2
3	1.42	1.42							8.0	8.0	0.04	0.04	0.005	0.005			3
4	1.20	1.21							7.0	7.5	0.02	0.03	0.006	0.011			4
5	1.21	1.22							7.5	7.5	0.02	0.03	0.000	0.005			5
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11	1.18	1.34							7.6	7.8	0.02	0.03	0.009	0.012			11
12	1.20	1.20							7.3	7.6	0.02	0.03	0.000	0.009			12
13	1.17	1.31							7.4	7.5	0.03	0.12	0.007	0.010			13
14	1.16	1.31							7.3	7.5	0.02	0.02	0.009	0.011			14
15	1.34	1.47							7.5	7.5	0.03	0.03	0.007	0.010			15
16	1.33	1.33							7.3	7.3	0.02	0.02	0.006	0.006			16
17	0.98	0.98							7.3	7.3	0.02	0.02	0.002	0.002			17
18	1.27	1.28							7.4	7.6	0.03	0.03	0.002	0.004			18
19	1.27	1.31							7.3	7.3	0.03	0.06	0.009	0.012			19
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30	1.34	1.34							7.5	7.5	0.05	0.05	0.001	0.001			30
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Licensed Operator: Edward A. Woolf

License Number: T3-0023163 Telephone No.: (609) 893-8188

I hereby certify the above to be correct

Signature: _____ Date: _____

EXHIBIT C

LACEY MUA
Distribution System Samples 2023

Sample Site	PH Sample by Contract Lab 9/12/23	PH Sample by Lacey MUA 9/12/23	PH Sample by Contract Lab 12/12/23	PH Sample by Lacey MUA 12/12/23
Site #1	6.8	7.7	6.9	7.6
Site #2	6.9	7.6	7.0	7.6
Site #3	6.8	7.6	7.1	7.8
Site #4	7.2	7.4	7.3	7.6
Site #5	6.9	7.4	7.0	7.6
Site #6	6.8	7.5	7.1	7.5
Site #7	6.9	7.5	7.1	7.7
Site #8	6.8	7.4	6.9	7.6
Site #9	6.9	7.6	7.1	7.5
Site #10	6.9	7.5	7.0	7.4
Site #11		7.6		7.4
Site #12		7.5		7.5
Site #13		7.5		7.6
Site #14		7.4		7.7
Site #15		7.5		7.7

Water Quality Parameter PH Range 7.0 - 8.0