2019 Annual Drinking WATER QUALITY REPORT

PUBLIC WATER SYSTEM ID NJ 1424001 SPRING/SUMMER 2020

Information About Your Drinking Water

- This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.
- Este informe contiene información importante sobre su agua potable. Si no lo entiende, por favor alguien tiene que traducer para usted.

A MESSAGE FROM THE CHAIRMAN OF THE BOARD

The Southeast Morris County Municipal Utilities Authority (SMCMUA) is pleased to share this 2019 Annual Drinking Water Quality Report with you, our consumer, in accordance with the Federal and State Safe Drinking Water Acts. This information is being made available so you can learn more about the finished (treated) water delivered to your tap. *We ask our consumers to be attentive to the messages contained in this report regarding vulnerable populations and persons on sodium-restricted diets. These persons should seek advice about drinking water from their health care provider.*

This report provides a summary of water quality data collected from the raw and finished water sources introduced into our service area, including surface and groundwater supplies owned by SMCMUA, and supplies purchased from Passaic Valley Water Commission (PVWC) and Morris County Municipal Utilities Authority (MCMUA). SMCMUA was in compliance with all primary, enforceable standards for 2019. This report includes data for regulated contaminants, secondary (aesthetic) parameters and unregulated contaminants.

Several sources of supply exceeded the Recommended Upper Limit (RUL) for sodium, chloride and total dissolved solids attributed to the use of sodium chloride for de-icing of roadways. As our consumers and our customers, we encourage you to review this report. If you have any questions, please contact our Customer Service Division.

Sincerely,

Saverio Iannaccone
Board Chairman

SMCMUA Board Members

- Saverio Iannaccone, Chairman
- Donald Kissil, Vice Chairman
- Ralph Rotando, Secretary
- Michael Chumer, Ph.D., Member
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SOUTHEAST MORRIS COUNTY MUNICIPAL UTILITIES AUTHORITY (SMCMUA) WATER SYSTEM DESCRIPTION

SMCMUA, a public entity created pursuant to N.J.S.A. 40:14B-1 et seq., provides potable water and water services to customers within its creating municipalities or District (the Town of Morristown, the Township of Morris, the Township of Hanover, and Borough of Morris Plains) as well as to certain customers and municipalities outside its District, including the Townships of Chatham, Mendham, Harding, Randolph, Parsippany-Troy Hills and the Borough of Florham Park. It also supplies water at wholesale rates to the MCMUA and the Borough of Wharton. The Authority provides water to approximately 62,000 residents, delivering approximately 8.8 million gallons per day (MGD) on an average daily basis and in excess of 13.6 MGD during peak demand periods.

SMCMUA treats and distributes surface water from the Clyde Potts Reservoir and from groundwater sources originating from the glacial sand and gravel aquifer and the Brunswick aquifer. Clyde Potts Reservoir water is treated using membrane filtration, granular activated carbon adsorption, corrosion control treatment (CCT) and chlorine disinfection. All groundwater sources receive chlorine disinfection. Additionally, two wells are treated for the removal of volatile organic contaminants and two wells are treated for the removal of manganese.

SMCMUA purchases finished water through interconnections with MCMUA and PVWC. Finished water from MCMUA originates from groundwater sources. Finished water purchased from PVWC is a blend of water obtained from PVWC's Little Falls Water Treatment Plant (LFWTP) and/or the North Jersey District Water Supply Commission's (NJDWSC's) Wanaque Water Treatment Plant. The LFWTP treats mostly Passaic and Pompton River waters using a treatment process consisting of coagulation, sedimentation, ozone primary disinfection, granular activated carbon/sand filtration, chlorine secondary disinfection and CCT. The Wanaque Water Treatment Plant treats Wanaque Reservoir water using a treatment process consisting of coagulation, sedimentation, anthracite/sand filtration, primary and secondary chlorine disinfection, and CCT.

SOURCES OF CONTAMINANTS IN TAP AND BOTTLED WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's (USEPA) Safe Drinking Water Information Hotline at 800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals (which can be naturally occurring or result from urban stormwater runoff), may also come from industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides may come from a variety of sources, such as agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals (which are byproducts of industrial processes and petroleum production), may also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER: REPORTING REQUIREMENTS NOT MET FOR THE SOUTHEAST MORRIS COUNTY MUNICIPAL UTILITIES AUTHORITY

Our water system recently violated a drinking water requirement. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation. We are required to collect 30 lead and copper samples annually, notify participating consumers of their results within 30 days of receipt and notify the Department of Environmental Protection (NJDEP) that the participating consumers have been notified of their individual results within 3 months of notification. In 2018, SMCMUA completed all required monitoring and notified the participating consumers of individual tap results within 30 days but failed to notify the NJDEP that the consumers had been notified. There is nothing you need to do at this time. The NJDEP was notified on August 5, 2019 that consumers were notified of their individual tap results in July and August of 2018. No further corrective action is required at this time.

SOURCE WATER ASSESSMENT PROGRAM (SWAP)

The purpose of NJDEP's SWAP is to provide for the protection and benefit of public water systems and to increase public awareness and involvement in protecting the sources of public drinking water; information is available through www.state.nj.us/dep/swap. The SWAP Plan identified susceptibility ratings for eight contaminant categories identified below for each source for the system. Each contaminant group was assigned a susceptibility rating of L-low, M-medium and H-high. If a drinking water source's susceptibility rate is high, it does not necessarily mean the drinking water is contaminated. The rating reflects the potential for contamination of source water, not the existence of contamination. SMCMUA has identified the watershed and wellhead protection areas for the Clyde Potts Reservoir and the ground water sources owned by SMCMUA. The contaminant categories include:

- Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- Nutrients: Compounds, minerals and elements that aid growth and are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- Volatile Organic Contaminants (VOCs): Man-made chemicals used as solvents, degreasers and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE) and vinyl chloride.
- Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides, such as atrazine, and insecticides, such as chlordane.
- Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead and nitrate.
- Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information, go to http://www.nj.gov/dep/rpp/radon/index.htm or call 609-984-5425.
- Disinfection By-product Precursors: A common source is naturally occurring organic matter in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example, leaves) present in surface water.

The susceptibility ratings for all source waters treated and distributed to SMCMUA's service area are included in Table 1 below.

TABLE 1
SOURCE WATER SUSCEPTIBILITY RATINGS

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection By-product Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
SMCMUA																								
Wells – 11		10	1	10	1			2	9	11			5	6		2	9		11			6	5	
Surface water intakes – 1	1				1				1		1		1					1			1	1		
MCMUA																								
Wells – 8		8		4	2	2		2	6	2		6		1	7	1	6	1	2	6		5	3	
PVWC's LFWTP																								
Surface water intakes – 4	4			4				1	3		4		4					4			4	4		
NJDWSC's Wanaque WTP																								
Surface water intakes – 5	5			5				2	3		5		5					5			5	5		

CRYPTOSPORIDIUM

The USEPA required surface water systems to monitor for *Cryptosporidium* and *E. coli* in the source waters, before treatment. A second round of monitoring was completed in 2017 that required monthly sampling of the source water for a total of 24 consecutive months where the results were utilized to identify the need to install additional treatment. This monitoring requirement applied to SMCMUA's Clyde Potts Water Treatment Plant (WTP), PVWC's Little Falls WTP (LFWTP) and NJDWSC's Wanaque WTP. SMCMUA purchases water from PVWC that may consist of finished water from the LFWTP, Wanaque WTP or a blend of the two. Table 2 below summarizes the data collected to date for this program, including *Giardia* results collected for informational purposes. The results of this study demonstrated that no additional treatment was required for *Cryptosporidium* for SMCMUA, PVWC or the Wanaque WTPs.

TABLE 2
SURFACE SOURCE WATER MICROBIAL CONTAMINANTS

CONTAMINANT	SMCMUA PWS ID NJ1424001	PVWC PWS ID NJ1605002 NJDWSC PWS ID NJ1613001	TYPICAL SOURCE
Cryptosporidium, oocysts/L	ND - 0.273	ND - 0.878	Microbial pathogens found in surface waters throughout the United States.
Giardia, cysts/L	ND - 1.6	ND - 2.047	
E. coli, MPN /100 mL	ND - 26.5	9.6 – >2419.6	

TABLE 3
2019 DETECTED REGULATED CONTAMINANTS COLLECTED FROM WATER OBTAINED AFTER TREATMENT AT THE POINTS OF ENTRY TO THE DISTRIBUTION SYSTEM

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The State of New Jersey allows the Authority to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of this data, though representative, may be more than one year old.

PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	SMCMUA PWS ID NJ1424001	Purchased Water Results: PVWC PWS ID NJ1605002 NJDWSC PWS ID NJ1613001	Purchased Water Results: MCMUA PWS ID NJ1432001	TYPICAL SOURCE
TURBIDITY AND TOTAL ORGANIC CARBON				Highest Result, Range and Year of Results			
Turbidity* (NTU)	Yes	NA	TT = 1	0.32 (0.02 - 0.32) 2019	[a]2.1 (0.09 average) 2019	N/A	Soil runoff.
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	99.9% 2019	98.6% 2019	N/A	
	*Turbidity is a measure of the cloudiness of the water, and is monitored as an indicator of water quality. High Turbidity can hinder the effectiveness of disinfectants [a]NJDWSC incurred a Combined Filter Effluent Turbidity violation in May 2019. There is nothing you need to do. You weren't being supplied with water from NJDWSC at the time of the turbidity violation. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.						
Total Organic Carbon (%)	Yes	NA	TT = % removal	N/A	(25 - 50% required) (Range 58 - 100%) 2019	N/A	Naturally present in the environment.
CONTAMINANTS				Highest Result, Range and Year of Results			
Methyl t-Butyl Ether (ppb)	Yes	70	70	4.7 RAA (ND - 7.3) 2019	ND 2019	ND 2019	Leaking underground gasoline and fuel oil tanks, gasoline and fuel spills
Tetrachloroethene	Yes	1	1	0.166 RAA (ND - 0.60) 2019	ND 2019	ND 2019	Discharge from factories and dry cleaners
Trichloroethene	Yes	1	1	0.056 RAA (ND - 0.56) 2019	ND 2019	ND 2019	Discharge from metal degreasing sites and other factories
Arsenic (ppb)	Yes	NA	5	1.1 (ND - 1.1) 2019	ND 2019	0.5 (ND - 0.5) 2017	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Yes	2	2	0.127 (0.0078 - 0.127) 2019	(0.0069 - Less than 0.10) 2019	0.5 (ND - 0.5) 2017	Erosion of natural deposits.
Chromium (ppb)	Yes	100	100	ND 2019	ND 2019	1.1 (ND - 1.1) 2017	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride (ppm)	Yes	4	4	0.23 (ND - 0.23) 2019	0.050 (ND - 0.050) 2019	0.2 (0.05 - 0.2) 2017	Erosion of natural deposits.
Nickel (ppb)	NA	NA	NA	0.64 (ND - 0.64) 2019	2.53 (ND - 2.53) 2019	1.6 (ND - 1.6) 2017	Erosion of natural deposits.
Nitrate (ppm)	Yes	10	10	4.1 (ND - 4.1) 2019	2.81 (ND - 2.81) 2019	3.3 (0.9 - 3.3) 2019	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium (ppb)	Yes	50	50	ND 2019	ND 2019	0.9 (ND - 0.9) 2017	Erosion of natural deposits.
Alpha Emitters (pCi/L)	Yes	0	15	3.16 (ND - 3.16) 2017	ND 2014	4.4 Highest Average (ND - 4.4) 2016 - 2017	Erosion of natural deposits.
Combined Radium 226 & 228 (pCi/L)	Yes	0	5	1.49 (ND - 1.1) 2017	ND 2014	ND 2017	Erosion of natural deposits.

TABLE 4
2019 DETECTED CONTAMINANTS COLLECTED FROM WATER WITHIN SMCMUA'S SERVICE AREA

PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	DISTRIBUTION SYSTEM SAMPLE RESULTS	TYPICAL SOURCE
MICROBIOLOGICAL CONTAMINANTS				Highest Monthly Result	
Total Coliform Bacteria (%)	Yes	0	5% of monthly samples are positive	1.3% (one sample was Total Coliform positive)	Naturally present in the environment.
DISINFECTION BYPRODUCTS - STAGE II			LRAA OEL	Highest LRAA and Range of Results	
Haloacetic Acids (HAA5) (ppb)	Yes	NA	60	40.7 (3.8 - 46.4)	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	Yes	NA	80	62.3 (9.4 - 86.9)	By-product of drinking water disinfection.
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer.					
DISINFECTANTS		MRDLG	MRDL	Highest RAA and Range of Results	
Chlorine (ppm)	Yes	4	4	1.75 Highest RAA (0.00 - 2.88)	Water additive used to control microbes.

LEAD

If present, elevated levels of lead can cause serious health problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. SMCMUA is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Information Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead.

Samples collected during 2017 standard monitoring confirmed that lead and copper results were below their respective action levels at the 90th percentile; therefore, SMCMUA conducted reduced lead and copper sampling during 2019 in accordance with USEPA and NJDEP requirements. The results are summarized in Table 5. If you are concerned about lead in your water, you may wish to have your water tested. If so, please contact SMCMUA's Customer Service Division to schedule a water test.

- SMCMUA's website has additional information on lead and copper under the Water Quality tab at www.smcmua.org. The website content includes sample results, informational resources on sources of lead, lead free plumbing certifications and how to request a home water sampling kit.
- EPA and NJDEP Consumer and School/Childcare Information on Lead is available at http://www.nj.gov/dep/watersupply/dwc-lead.html

TABLE 5
2019 LEAD AND COPPER MONITORING RESULTS

Contaminant	Compliance Achieved	MCLG	Action Level	90th Percentile	Typical Source
Copper (ppm)	Yes	1.3	1.3	0.9736 (1 of the 36 samples exceeded the AL) 2019	Corrosion of household plumbing systems.
Lead (ppb)	Yes	0	15	2.4 (1 out of 36 samples exceeded the AL) 2019	Corrosion of household plumbing systems.

TABLE 6
2019 SECONDARY CONTAMINANTS
(AESTHETIC, NONENFORCEABLE STANDARDS)

Contaminant	N.J. Recommended Upper Limit (RUL)	SMCMUA PWSID NJ1424001 2019 Data		PVWC-Little Falls WTP PWSID NJ1605002 NJDWSC-Wanaque WTP PWSID NJ1613001		MCMUA PWSID NJ1432001 2017 Data	
		Range of Results	RUL Achieved	Range of Results	RUL Achieved	Range of Results	RUL Achieved
A.B.S./L.A.S., ppm	0.5	ND - 0.1	Yes	ND - 0.06	Yes	ND - 0.08	Yes
Alkalinity, ppm	NA	13.9 - 239	NA	28 - 80	NA	24 - 122	NA
Aluminum, ppb	200	ND - 47.2	Yes	20 - 42	Yes	1.10 - 4.53	Yes
Chloride, ppm	250	40.4 - 350	No	44 - 161	Yes	8.39 - 94.26	Yes
Color, CU	10	ND	Yes	2 - Less than 5	Yes	ND	Yes
Corrosivity	Non-Corrosive	Corrosive	No	Corrosive	No	Corrosive	No
Hardness (as $CaCO_3$), ppm	250	35.0 - 394	No	43 - 172	Yes	56 - 152	Yes
Hardness (as $CaCO_3$), grains/gallon	14.6	2.0 - 23.0	No	3.0 - 10.0	Yes	3.3 - 8.9	Yes
Iron, ppb	300	ND - 215	Yes	17 - Less than 100	Yes	ND	Yes
Manganese, ppb	50	ND - 21.1	Yes	*ND - 211	Yes	ND - 19.0	Yes
Odor, TON	3	ND - 3	Yes	ND - 9	No	ND - 35	No
pH	6.5 to 8.5	6.4 – 8.2	No	8.1 - 8.4	Yes	5.5 - 8.0	No
Sodium, ppm	50	19.0 - 129	No	23 - 115	No	6 - 55	No
Sulfate, ppm	250	7.3 - 122	Yes	6 - 82	Yes	ND - 15.4	Yes
Total Dissolved Solids, ppm	500	129 - 844	No	188 - 561	No	79.5 - 242.5	Yes
Zinc, ppb	5,000	ND – 258	Yes	10 - Less than 40	Yes	0.58 - 21.8	Yes

[1] IMPORTANT NOTICE ABOUT YOUR DRINKING WATER: SODIUM RECOMMENDED UPPER LIMIT EXCEEDED. Persons on sodium-restricted diets may be concerned about sodium levels in finished water above the New Jersey Recommended Upper Limit (RUL) of 50 ppm. Sodium was detected in the distribution system at levels ranging between 19.1 and 119.0 ppm. The highest concentrations of sodium in 2019 were attributed to SMCMUA's Littleton Well and to water purchased from PVWC. Sodium is naturally present in the source water and its presence may also be the result of the use of road salt for de-icing roadways. For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, persons on sodium-restricted diets should seek advice about drinking water from their health care providers.

*At times during 2019, the level of manganese leaving the LFWTP was higher than the 50 ppb Recommended Upper Limit. The Recommended Upper Limit (RUL) for manganese is based on staining of laundry. Manganese is an essential nutrient and toxicity is not expected from high levels which would be encountered in drinking water.

UNREGULATED CONTAMINANTS

The 1996 Safe Drinking Water Act (SDWA) amendments require the EPA to issue, every five years, a new list of no more than 30 unregulated contaminants to be monitored by public water systems. SMCMUA completed monitoring for UCMR4 in 2019. Data collected are provided in Table 7. These samples were collected after treatment, at the point of entry to the distribution system.

TABLE 7
UCMR4 and other UNREGULATED CONTAMINANTS

UNREGULATED CONTAMINANTS	SMCMUA PWS ID NJ1424001	Purchased Water Results		TYPICAL SOURCE
		PVWC PWS ID NJ1605002 NJDWSC PWS ID NJ1613001	MCMUA PWS ID NJ1432001	
	Highest Result, Range			
1,1-dichloroethane (ppb)	ND - 0.69 2018	ND 2018	ND 2018	It is an industrial chemical used as a solvent.
1,4-dioxane (ppb)	ND - 0.70 2019	ND - 0.09 2019	ND 2014	It is used as a solvent or solvent stabilizer in the manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.
Chromium (total) (ppb)	ND 2019	ND 2019	ND - 1.11 2017	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes and pigments, leather tanning and wood preservation.
Perfluorobutanesulfonic acid (PFBS) (ppt)	ND - 4.0 2019	ND - 2.1 2019	ND - 3.5 2019	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluoroheptanoic acid (PFHpA) (ppt)	ND - 4.0 2019	ND - 2.7 2019	ND 2019	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorohexanesulfonic acid (PFHxS) (ppt)	ND - 8.5 2019	ND - 2.9 2019	ND 2019	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorononanoic acid (PFNA) (ppt)	ND 2019	ND 2019	ND 2019	Manmade chemical; used in products to make them stain, grease, heat and water resistant.
Perfluorooctanoic acid (PFOA) (ppt)	ND - 15.0 2019	3.9 - 10.0 2019	ND - 7.4 2019	PFOA is used in the manufacture of fluoropolymers, substances which provide non-stick surfaces on cookware and waterproof, breathable membranes for clothing
Perfluorohexanoic acid (PFHxA) (ppt)	ND - 6.5 2019	ND - 5.4 2019	ND - 5.9 2019	Breakdown product of stain- and grease-proof coatings on food packaging and household products.
Perfluorooctane sulfonate (PFOS) (ppt)	ND - 5.8 2019	ND - 8.6 2019	ND - 5.5 2019	PFOS was used in firefighting foams and various surfactant uses; few of which are still ongoing because no alternatives are available.
Chlorate (ppb)	26 - 180 2015	35 - 413 2019	ND - 120 2014	Chlorate compounds are used in agriculture as defoliants or desiccants and may occur in drinking water related to use of disinfectants such as chlorine dioxide.
UCMR4 CYANOTOXINS				
Anatoxin-a (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Cylindrospermopsin (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin -LA (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin-LF (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin-LR (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin-LY (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin-RR (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Microcystin-YR (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Nodularin (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
Total Microcystins & Nodularins (ppb)	ND 2018	ND 2018	-	Toxins naturally produced and released by cyanobacteria ("blue-green algae").
UCMR4 HALOACETIC ACIDS and INDICATORS				
Bromide (ppb)	20.3 - 23.9 2019	33.0- 69.0 2019	ND - 35.0 2019	Naturally occurring inorganic matter that reacts with disinfectants to form disinfection by-products.

TABLE 7 UCMR4 and other UNREGULATED CONTAMINANTS (CONTINUED)				
Total Organic Carbon (TOC) (ppm)	2.30 - 3.12 2019	4.0 - 7.0 2019	ND 2019	Naturally occurring organic matter that reacts with disinfectants to form disinfection by-products.
Bromochloroacetic acid (ppb)	ND - 6.44 2019	-	ND - 0.5 2019	By-product of drinking water disinfection.
Bromodichloroacetic acid (ppb)	ND - 6.80 2019	-	ND 2019	By-product of drinking water disinfection.
Chlorodibromoacetic acid (ppb)	ND - 2.87 2019	-	ND 2019	By-product of drinking water disinfection.
Dibromoacetic acid (ppb)	ND - 2.47 2019	-	ND 2019	By-product of drinking water disinfection.
Dichloroacetic acid (ppb)	0.684 - 20.1 2019	-	ND - 0.37 2019	By-product of drinking water disinfection.
Monobromoacetic acid (ppb)	ND - 0.452 2019	-	ND 2019	By-product of drinking water disinfection.
Monochloroacetic acid (ppb)	ND 2019	-	ND 2019	By-product of drinking water disinfection.
Tribromoacetic acid (ppb)	ND 2019	-	ND 2019	By-product of drinking water disinfection.
Trichloroacetic acid (ppb)	ND - 37.9 2019	-	ND 2019	By-product of drinking water disinfection.
UCMR4 METALS				
Germanium (ppb)	ND 2019	ND 2019	ND 2019	Naturally-occurring element; commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics and solar applications.
Manganese (ppb)	ND - 3.98 2019	2.0 - 14.0 2019	ND - 19.0 2019	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient.
UCMR4 PESTICIDES				
alpha-Hexachlorocyclohexane (ppb)	ND 2019	ND 2019	ND 2019	Component of benzene hexachloride (BHC); formerly used as an insecticide.
Chlorpyrifos (ppb)	ND 2019	ND 2019	ND 2019	Organophosphate; used as an insecticide, acaricide and miticide.
Dimethipin (ppb)	ND 2019	ND 2019	ND 2019	Used as an herbicide and plant growth regulator
Ethoprop (ppb)	ND 2019	ND 2019	ND 2019	Used as an insecticide
Oxyfluorfen (ppb)	ND 2019	ND 2019	ND 2019	Used as an herbicide
Profenofos (ppb)	ND 2019	ND 2019	ND 2019	Used as an insecticide and acaricide
Tebuconazole (ppb)	ND 2019	ND 2019	ND 2019	Used as a fungicide
Permethrin, cis & trans (ppb)	ND 2019	ND 2019	ND 2019	Used as an insecticide
Tribufos (ppb)	ND 2019	ND 2019	ND 2019	Used as an insecticide and cotton defoliant
UCMR4 SEMIVOLATILE CHEMICALS				
Butylated hydroxyanisole (ppb)	ND 2019	ND 2019	ND 2019	Used as a food additive (antioxidant)
o-Toluidine (ppb)	ND 2019	ND 2019	ND 2019	Used in the production of dyes, rubber, pharmaceuticals and pesticides
Quinoline (ppb)	ND 2019	ND 2019	ND 2019	Used as a pharmaceutical (antimalarial) and flavoring agent; produced as a chemical intermediate; component of coal
UCMR4 ALCOHOLS				
1-Butanol (ppb)	ND 2019	ND 2019	ND 2019	Used as a solvent, food additive and in production of other chemicals
2-Methoxyethanol (ppb)	ND 2019	ND 2019	ND 2019	Used in numerous consumer products, such as synthetic cosmetics, perfumes, fragrances, hair preparations and skin lotions
2-Propen-1-ol (ppb)	ND 2019	ND 2019	ND 2019	Used in the production flavorings, perfumes and other chemicals

DEFINITIONS OF TERMS AND ACRONYMS

AL: Action Level; the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

CDC: Centers for Disease Control

CU: Color Unit

Inorganic Contaminants: Contaminants such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming. These contaminants may be present in source water.

LRAA: Locational Running Annual Average; the average of sample analytical results for samples taken at a specific monitoring location during the previous four calendar quarters.

MCL: Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal; the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCMUA: Morris County Municipal Utilities Authority

Microbial Contaminants/Pathogens: Disease-causing organisms, such as bacteria and viruses, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Common sources are animal and human fecal wastes. These contaminants may be present in source water.

MRDL: Maximum Residual Disinfectant Level; the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal; the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA: Not applicable.

ND: Not detected.

NJDWSC: North Jersey District Water Supply Commission

NTU: Nephelometric Turbidity Unit

OEL: Operational Evaluation Level; level of disinfection byproducts determined by calculating the average of the results at a location for the two previous quarters and two times the current quarter's results. If this value exceeds 60 ppb for HAA5s or 80 ppb for TTHMs, it initiates a comprehensive review of system operations and allows systems to take proactive steps to remain in compliance with the Stage 2 Disinfection Byproduct Rule MCLs.

ppb: parts per billion

ppm: parts per million

ppt: parts per trillion

PWS ID: Public Water System Identification

PVWC: Passaic Valley Water Commission

RAA: Running Annual Average

RUL: Recommended Upper Limit; the highest level of a constituent of drinking water that is recommended in order to protect aesthetic quality.

SMCMUA: The Southeast Morris County Municipal Utilities Authority

TON: Threshold Odor Number

TT: Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water.

Turbidity: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

USEPA: United States Environmental Protection Agency

Take steps each day to save water and protect the environment by choosing WaterSense labeled products in your home, yard, and business. Learn more about WaterSense and how we can all get more by using less. https://www.epa.gov/watersense

WAYS TO PAY YOUR BILL

SMCMUA has many convenient options to pay your bill. NOTE: If you have an urgent shutoff notice, please pay online, by phone or in person.

Pay Online

Visit www.smcmua.org and click "Pay Water Bill". From there, you can make a one-time payment or register your account on the new payment portal. Once registered, you will be able to pay your bill with a credit/debit card or E-check, view your past bills, and sign up for Autopay and Paperless Billing. All you need to set up an account is an email address and your account number. *Convenience fees apply for credit or debit card payments.

Pay by Phone

Call 1-844-562-2135, 24 hours a day, 7 days a week for assistance (English and Spanish) with making a credit card, debit card, or E-check payment. *Convenience fees may apply.

Pay by Mail

Mail payment to:

SMCMUA
PO Box 16036
Lewiston, ME 04243-9515

Please make sure your 12-digit account number is on your check.

Pay in Person

In person lobby hours are suspended temporarily due to COVID-19. Please check SMCMUA's website for updates. Customers can utilize the convenient Drop Box located at the entrance to the Headquarters Facility, available 24/7. *Please pay by check or money order. Cash is not an acceptable form of payment in the Drop Box.

Register for Citizen Alerts for Water Emergencies

Visit our website at www.smcmua.org to register for emergency notifications under the "Register for Citizen Alerts" button on the homepage.

It is recommended that all household members, and any employees in a place of business, sign up for these alerts to receive these emergency notifications.

Update Your Contact Information

Please visit www.smcmua.org and click "Update Account Information". You can also call Customer Service 973-326-6880 or email customerservice@smcmua.org to update your account.

SMCMUA utilizes this information to alert customers about possible disruptions in service, and other important water related issues.

PUBLIC INVOLVEMENT OPPORTUNITIES

Board Meetings: All meetings are currently being held utilizing conference calls due to COVID-19 response measures. Please monitor SMCMUA's website for updates. Public Meetings are typically held the third Thursday of each month at 7:00 PM, unless notice is given to the contrary. Contact our Customer Service Division, or visit our website, for SMCMUA's full Public Meeting schedule.

Protect and Preserve Local Water Resources: Contact the Passaic River Coalition to get involved at 973-532-9830 or http://passaicriver.org.

Whippany River Watershed Action Committee: Contact WRWAC at http://www.wrwac.org.

PUBLIC EDUCATION AND RESOURCES

Information available to the public about drinking water can be found using the references provided below:

Agency	Website	Phone
United States Environmental Protection Agency (USEPA)	http://water.epa.gov	Safe Drinking Water Information Hotline: 800-426-4791
New Jersey Department of Environmental Protection (NJDEP)	www.nj.gov/dep/watersupply	Bureau of Safe Drinking Water: 609-292-5550
New Jersey American Water Works Association (NJAWWA)	www.njawwa.org www.drinktap.org	New Jersey AWWA: 866-436-1120

If you have received notification that you need new or replacement automatic meter reading equipment, make your appointment today!

Contact Customer Service at 973-326-6880 or customerservice@smcmua.org to setup an appointment to have new or replacement automatic meter reading equipment installed in your residence free of charge.