

**CITY OF MOUNT VERNON
BOARD OF WATER SUPPLY**

City Hall - Room 2
Mount Vernon, New York 10550

Shawyn Patterson Howard
Mayor

Carlton C. Spruill
Commissioner

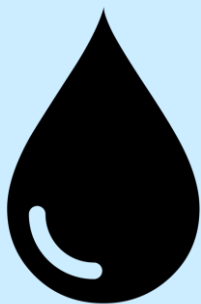
John F. Arena 1B/D
Superintendent



YEAR 2022

**WATER QUALITY
REPORT**

PWS ID NY5903441



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The Board of Water Supply of the City of Mount Vernon (**Public Water System Identification Number 5903441**) is pleased to present the Annual Drinking Water Quality Report for 2022 as required by Federal and State regulations. The purpose of this report is to raise your understanding of drinking water and your awareness of the need to protect our drinking water resources. It provides information on where your water comes from, what it contains and how it compares with standards set by Federal and State regulatory agencies. Last year, your tap water met all State drinking water health standards and we are proud to report that our water system did not violate a maximum contaminate level or monitoring standard in 2022. For more information or to discuss any drinking water issues, feel free to contact John F. Arena, Superintendent, at (914) 668-7820. Or, you may call the Westchester County Department of Health, Bureau of Environmental Quality at (914) 813-5000. Your water bill also has useful information about your water supply. Further information about contaminants and potential health effects is available at www.epa.gov/safewater.

Source of Water Supply

The Board of Water Supply receives all its water from New York City's Catskill / Delaware reservoir system, an unfiltered surface supply located in a protected watershed area in upstate New York west of the Hudson River. New York City's Department of Environmental Protection (DEP) oversees the operation, maintenance, and protection of their reservoir system. It consists of 19 reservoirs and three controlled lakes, all of which allow for maximum flexibility in delivering the highest quality water possible. The water travels through the Catskill and Delaware Aqueducts to the Kensico Reservoir, where it is blended under normal operating conditions. This blending enhances overall water quality. The Kensico Reservoir also acts as a large settling basin, since it takes from twenty to thirty days for the water to travel from one end to the other. During this time, any particulate matter or "turbidity" from spring run-off or heavy rains can settle out in the reservoir, thereby clarifying the water. From Kensico, the water continues south, entering Mount Vernon at two locations.

The first location takes its water from the 48 inch Kensico Line which is owned and operated by Westchester County Water District #1. Water enters the 48 inch Kensico Line from the Delaware Aqueduct at Shaft 22 in Yonkers. Under certain operating conditions, water can enter the Kensico Line at Kensico Reservoir and be delivered all the way south to Mount Vernon.

The second entry point for Mount Vernon is in south central Yonkers. Water from the Catskill Aqueduct passes into a large transmission main just before reaching Hillview Reservoir. It travels through Yonkers and into Mount Vernon.

From these entry points, the water enters the 106 miles of distribution piping to serve Mount Vernon's 73,893 residents through 10,160 metered service connections. In 2022 alone, 2.71 billion gallons of water coursed through the city's mains. The average daily flow was 7.42 million gallons (MG) and the highest single day was 9.86 mg. Unaccounted for water (resulting from service leaks and main breaks, fire fighting, hydrant flushing, under-registration of meters, and unauthorized use) comprised 25.4 % of the total. The industry average is 25 to 35% unaccounted for water.

Water Treatment

The water is disinfected with chlorine and ultraviolet light. Ultraviolet light treatment involves passing the water through special lamps that emit ultraviolet radiation. The UV waves inactivate harmful organisms.

The water is also fluoridated (to protect against tooth decay) by New York City DEP at Kensico Reservoir Shaft 18. DEP is one of the many water suppliers in New York State that since 1966 has treated its water with a controlled low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control and Prevention, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 to 1.2 mg/L (parts per million). On February 14, 2012, after receiving authorization from the NYC

Department of Health and Mental Hygiene, DEP reduced the target dosage of fluoride from 1.0 mg/L to 0.7 mg/L.

During 2022, other than brief outages to perform preventive and corrective maintenance, DEP provided continuous fluoride treatment on the Catskill / Delaware supply. During 2022 only 0.35% of water produced was not fluoridated.

Either Westchester County Water District #1 or Mount Vernon again adds calcium hypochlorite or chlorine at the entry point in order to provide a detectable chlorine residual throughout the distribution system. Additionally, sodium hydroxide is added for pH adjustment, and orthophosphate is added to coat the interior surface of the pipes, thereby shielding them from the corrosive action of the water. The goal of this treatment is to reduce the amount of lead and copper leaching into the water from the individual service lines and household plumbing. Test results indicate that it has been quite effective.

Board of Water Supply Responsibilities

The Board of Water Supply ensures Mount Vernon's compliance with all federal and state monitoring and reporting requirements, and maintains and repairs water mains, service lines (from the curb valve to the main), fire hydrants, and water meters. During 2022, the Water Board installed 35 and repaired 21 hydrants; installed, repaired, or replaced 181 meters; repaired 63 main breaks and street side service leaks, serviced 83 water boxes, and made 38 water taps and cut-ins. We also replaced 2 plastic & 39 lead and service lines.

Capital Improvements

The city of Mount Vernon, New York will launch a Lead Service Line Program in 2023. This program will identify and inventory water service line materials, including those containing lead, from the city's water main to residential and commercial water meters. The program will compile and report Mount Vernon's water service line to the NYSDOH by October 16, 2024. The comprehensive program will begin Lead replacement this year.

Cost of Water

Given that the typical annual consumption for a family of four is 146,537 gallons, the average quarterly water bill was approximately \$ 258.66. Residential water rates for 2022 were \$3.64 per 100 cubic feet which are still among some of the lowest rates in Westchester County.

Health Considerations

All 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 Westchester County Dept of Health and/or the EPA's Safe Drinking Water Hotline (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 the 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 from human activity. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants, and organic chemical contaminants.

In order to ensure that tap water is safe to drink, the State and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Although our water met state and federal regulations, there are some people who may be more vulnerable to disease causing

microorganisms or pathogens in drinking water than the general population. Immuno-compromised 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 their drinking water from their health care providers. EPA/CDC guidelines on the appropriate means to lessen the risk of infection by Cryptosporidium, Giardia, and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment Program

The New York State Department of Health has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings relative to our water supply are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this public water system (PWS). This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

New York City Watershed

This PWS obtains water from the NYC water supply system. Water comes from the Catskill / Delaware watersheds west of the Hudson River. The NYC DEP has implemented a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas: the enforcement of Strengthened Watershed Rules and Regulations; the acquisition and protection of watershed lands; and implementation of partnership programs that target specific sources of pollution in the watersheds. Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for this PWS.

Source Specific Assessment

The reservoirs of the Catskill / Delaware watersheds west of the Hudson are in a mountainous rural area and are relatively deep with little development along their shorelines.

The main water quality concern associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae producing nutrients. There are also some potential contamination concerns associated with residential lands and associated wastewater discharges.

However, advanced treatments which reduce contaminants are in place for most of these discharges. There are also a number of other discrete facilities, such as landfills, chemical bulk storages, etc. that have the potential to impact local water quality, but large significant water quality problems associated with these facilities are unlikely due to the size of the watershed and surveillance and management practices. Additional information on the water quality and protection efforts in these NYC watersheds can be found at DEP's website at www.nyc.gov/html/dep/html/watershed_protection/index.shtml.

Information on Cryptosporidium and Giardia

Cryptosporidium is a microbial pathogen found in surface water and ground water under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2022, as part of routine sampling, NYC collected 52 weekly - 50 liter samples from their source water at Kensico Reservoir and analyzed them for Cryptosporidium oocysts. In these samples, 4 oocysts were detected. Due to the presence of low levels of Cryptosporidium in the source water, DEP constructed and now operates an ultraviolet treatment plant. Current test methods do not allow us to determine if the organisms are dead or if they are capable of

causing disease. The method also cannot distinguish among different species of Cryptosporidium, only a few of which can infect humans. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed / inactivated through a combination of filtration and disinfection or by disinfection alone. During 2022, as part of routine sampling, NYC collected 52 weekly a - 50 liter samples from their source water at Kensico Reservoir, and analyzed them for Giardia cysts. In these samples, 21 Giardia cysts were detected. Therefore, testing indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. The source water is disinfected before reaching our distribution system to remove / inactivate the Giardia cyst. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances, no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other similar settings where hand washing practices are poor.

In October 2012, NYC began treating Catskill / Delaware water at its Ultraviolet (UV) Disinfection Facility in Mount Pleasant and Greenburgh. It was built in part to comply with the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule which requires unfiltered surface water sources to have two types of disinfection. Before arriving at the UV Disinfection Facility, the water is disinfected with chlorine. It then flows under UV light which provides a secondary level of disinfection against potentially harmful microbiological contaminants such as Cryptosporidium and Giardia.

Additional information on Cryptosporidium and Giardia can be found on New York City DEP's website at www.nyc.gov/html/dep/.

Water Quality Testing and Variances

Water quality is monitored daily by Board of Water Supply personnel. Bacteriological and chemical samples are collected as required and analyzed by a New York State approved Environmental Laboratory to insure that the water meets all the physical, chemical, and bacteriological standards of the New York State Sanitary Code. In 2022, we conducted over 7,000 tests for approximately 200 different water contaminants. We only detected 30 which were within limits.

Under the Surface Water Treatment Rule, surface supplies such as those of New York City must be filtered unless certain stringent water quality and monitoring criteria are met. In 1991, New York was initially granted filtration avoidance through December 31, 2002, for the Catskill and Delaware supplies south of the Kensico Reservoir. This was based on the high quality of the source water and New York City's long term efforts to protect its watershed areas.

In 2002, the filtration avoidance determination (FAD) was extended to 2008. In 2008, the EPA issued a 10-year extension of

NYC's filtration waiver through the end of 2017. Which now has been extended to 2027. Under this agreement, NYC will continue to acquire undeveloped land and upgrade sewage treatment plants in watershed areas. Additionally, in 2012, the City completed the construction of the Ultraviolet Treatment Plant to provide additional disinfection and water quality protection, as required under the current FAD.

In 1991, Mount Vernon applied for and received filtration avoidance. This variance is still in effect, contingent on Mount Vernon and the City of New York continuing to meet avoidance criteria.

Unregulated Contaminants Monitoring Rule (UCMR 4).

In 1996, the Safe Drinking Water Act was amended to include a requirement that every 5 years, the EPA issue a list of new contaminants to be monitored by public water systems. The purpose is to establish occurrence data that will be used to support future regulations of these contaminants.

The Unregulated Contaminant Monitoring Rule (UCMR 4) for Public Water Systems and Announcement of Public Meeting" was published in the *Federal Register* on December 20, 2016 (81 FR 92666). UCMR 4 monitoring will occur from 2018-2020 and includes monitoring for a total of 30 chemical contaminants: 10 cyanotoxins (nine cyanotoxins and one cyanotoxin group) and 20 additional contaminants (two metals, eight pesticides plus one pesticide manufacturing byproduct, three brominated haloacetic acid [HAA] disinfection byproducts groups, three alcohols, and three semivolatile organic chemicals [SVOCs]).

Water Quality Data

The following table lists all the drinking water contaminants we detected during the 2022 calendar year. The presence of contaminants in the water does not necessarily indicate the water poses a health risk. In fact, during 2022, our system complied with all applicable State drinking water operating, monitoring, and reporting requirements.

Again this year, our TTHM and HAA5 monitoring samples were collected under Stage 2 of the Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR). Stage 2 focuses on public health protection by further limiting exposure to Disinfection Byproducts (Trihalomethanes and Haloacetic Acids). This rule requires that sites identified in 2008 during the Initial Distribution System Evaluation as having the highest disinfection byproduct concentration are used as monitoring sites for Stage 2 DBPR compliance monitoring. Furthermore, MCL compliance is now calculated for each monitoring location in the distribution system. This is called the Locational Running Annual Average (LRAA), and differs from the previous methodology which was based on the Running Annual Average of all sampling sites.

The data in this report is from the most recent testing done in accordance with regulations. Unless otherwise indicated the data in this table is from testing done between January 1 and December 31, 2022. Lead and copper values are from 2022. Since the Board of Water Supply has consistently maintained optimum water quality parameters, we received permission from the state to reduce the frequency of first draw lead and copper samples to once every three years. We will conduct lead and copper testing again in 2025.

The state requires us to monitor for certain other contaminants less than once per year because their concentrations are not expected to vary significantly from year to year. Not one of these contaminants has been detected during analyses conducted over the last five years.

Terms and Abbreviations Used Below

- ***Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements that a water system must follow.
- ***Level 1 Assessment:** A level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our system.
- ***Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG’s allow for a margin of safety.
- ***Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to MCLG as feasible using the best available treatment technology.
- ***Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in your drinking water.
- ***Maximum Residual Disinfection Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health.
- ***Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ***Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- ***Variance and Exemption:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- ***µS/cm:** Microsiemens per centimeter (a measure of the ability to conduct current) ***pCi/L:** Picocurie per liter (a measure of radioactivity)
- ***NDL:** No determined limit. ***ND:** Not detected in routine laboratory analysis. ***N/A:** Not applicable.
- ***ppb:** Parts per billion or micrograms per liter. ***ppm:** Parts per million or milligrams per liter. ***LT:** Less than.

Lead & Copper Contaminant	Date	Unit	MCL,TT, AL or MRDL	MCLG or MRDLG	Detected Level 90%	Range	# of Samples Above AL	Range of Samples Above AL	Total # of Samples	Major Sources	Violation
Lead and Copper Rule sampling at Residential Water Taps.											
Lead	2022	ppb	15 (a)	0	2.49	LT 1 – 8.34	0	0	30	Corrosion of household plumbing systems; erosion of natural deposits	No
Copper	2022	ppb	1300 (b)	1300	104	14.1 – 120.0	0	0	30	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	No

Contaminant	Date	Unit	MCL,TT, AL or MRDL	MCLG or MRDLG	Detected Level	Range	Major Sources	Violation
Regulated Inorganic Chemicals								
Aluminum	8/22	ppb	N/A	N/A	9.40	8.99 – 9.40	Erosion of natural deposits	No
Barium	8/22	ppb	2000	2000	14.7	13.5-14.7	Erosion of natural deposits	No
Chlorides	5/22	ppm	250	N/A	11.6	11.3 – 11.6	Naturally occurring or indicative of road salt contamination	No
Copper (Entry Point)	8/22	ppb	1300 (b)	1300	6.15	4.85 - 6.15	Erosion of natural deposits; leaching from wood preservatives	No
Fluoride	5/22	ppm	2.2	N/A	0.667	0.661 – 0.667	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	No
Color, Apparent	5/22	Color Units	15	N/A	5 (c)	5	Iron and manganese or organic sources, such as decaying leaves and plants	No
Iron	8/22	ppb	300 (d)	N/A	27.9	26.2 – 27.9	Naturally occurring	No
Manganese	8/22	ppb	300 (d)	N/A	12.4	11.6 – 12.4	Naturally occurring	No
Nickel	8/22	ppb	NDL	N/A	0.369	0.354-0.369	Naturally occurring	No
Nitrate	5/22	ppm	10	10	0.100	0.094-0.100	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No
Sodium	8/22	ppm	(e)	N/A	10.01	9.86 - 10.01	Erosion of natural deposits	No
Sulfate	5/22	ppm	250	N/A	4.09	3.96 – 4.09	Erosion of natural deposits	No
Zinc	8/22	ppb	5000	N/A	1.59	.953 – 1.59	Naturally occurring	No
Regulated Radionuclide Contaminants (Measured in Source Waters)								
Gross Alpha Particle	05/21	pCi/L	15	0	1.15+/-0.584 0.13+/-0.710 (f)	--	Decay of natural deposits and manmade emissions	No
Gross Beta Particle	05/21	pCi/L	50 (g)	0	1.88+/-0.858 0.14+/-0.827	--	Decay of natural deposits and manmade emissions	No
Combined Radium 226 / 228	05/21	pCi/L	5 (h)	0	0.726+/-0.679 0.116+/-0.542	--	Erosion of natural deposits	No
UCMR 4 Detected Contaminants								
Bromochloroacetic Acid	2020	ppb	60	N/A	1.26	1.05 – 1.51	Byproduct of drinking water chlorination	No
Bromodichloroacetic Acid	2020	ppb	60	N/A	1.79	1.07 – 2.89	Byproduct of drinking water chlorination	No
Monochloroacetic Acid	2020	ppb	60	N/A	2.61	2.61	Byproduct of drinking water chlorination	No
Dichloroacetic Acid	2020	ppb	60	N/A	17.14	11.7 – 23.8	Byproduct of drinking water chlorination	No
Trichloroacetic Acid	2020	ppb	60	N/A	26.85	12.2 – 41.3	Byproduct of drinking water chlorination	No
Manganese	2020	ppb	300 (d)	N/A	57.8	12.3 – 57.8	Naturally occurring	No
Microbiological Contaminants								
Total Coliform (i)	5/2022	N/A	5% or more Positive Samples.	0	1 Positive sample. (1.2%)	N/A	Naturally Present in the Environment	No
Total Coliform (i) (o)	7/2022	N/A	5% or more Positive Samples.	0	7 Positive samples. (7.7%)	N/A	Naturally Present in the Environment	No
Total Coliform (i)	8/2022	N/A	5% or more Positive Samples.	0	1 Positive sample. (1.2%)	N/A	Naturally Present in the Environment	No
Turbidity (Entry Point)	2022	NTU	5NTU(j)	N/A	1.08	0.39 – 1.08	Soil runoff	No
Turbidity (Distribution)	2022	NTU	5NTU(k)	N/A	1.27	0.40 – 1.27	Soil runoff	No
Free Cl ₂ Res. (Entry Point)	2022	ppm	4.0 MRDL	N/A	1.74	0.30 – 1.74	Water additive used to control microbes	No
Free Cl ₂ Res. (Distribution)	2022	ppm	4.0 MRDL	N/A	2.30	0.20 – 2.30	Water additive used to control microbes	No

Organic Parameters								
TTHM's	2022	ppb	80	N/A	47.0 (l)	15.1 – 64.5	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter	No
HAA5	2022	ppb	60	N/A	37.0 (l)	10.7 – 45.0	Byproduct of drinking water chlorination	No
Water Quality Parameters (Monitored for Corrosion Control)								
Total Alkalinity	2022	ppm	NDL	N/A	--	13.0-18.6	Erosion of natural deposits; impacted by water treatment chemicals	No
Calcium (m)	2022	ppm	NDL	N/A	--	5.73 – 8.01	Erosion of soil and rock formations	No
Orthophosphate	2022	ppm	NDL	N/A	--	.727 – 1.190	Water additive for corrosion control	No
pH	2022	-		N/A	--	6.90 – 7.40	Impacted by acid rain and water treatment chemicals	No
Specific Conductance	2022	µS/cm	NDL	N/A	--	80.5 – 99.9	Presence of ions due to erosion of natural deposits	No
Temperature	2022	°C	NDL	N/A	--	3.0 – 23.0		No

- (a) Action Level (not an MCL) is 15 ppb. Measured at the tap. All sample results between June 1 and September 30, 2019 were below the Action Level. The Detected Level is the 90th percentile of the 30 samples tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is greater than or equal to 90 percent of the lead values detected in the Distribution System. Will be tested again in 2022.
- (b) Action Level (not an MCL) is 1300 ppb. Measured at the tap. All sample results between June 1 and September 30, 2019 were below the Action Level. The Detected Level is the 90th percentile of the 30 samples tested. It is greater than or equal to 90 percent of the copper values detected in the Distribution System. Will be tested again 2022.
- (c) If a sample exceeds the MCL, a second sample must be collected within two weeks. If the average of the two results exceeds the MCL, then an MCL violation has occurred. The sample having the high color was collected from our Hillview entry point.
- (d) If iron & manganese are present, the total concentration of both should not exceed 500 ppb.
- (e) Water with greater than 20 mg/L sodium should not be consumed by those on a severely restricted sodium diet. People on a moderately restricted sodium diet should not consume water with greater than 270 mg/L.
- (f) The NYS DOH allows the Gross Alpha particle measurement to substitute for the required Uranium measurement, provided the Gross Alpha particle activity does not exceed 15 pCi/L.
- (g) The State considers 50pCi/L to be the level of concern for beta particles.
- (h) The MCL listed for Radium represents the combined value of Radium 226 and Radium 228.
- (i) Coliforms are bacteria which are naturally present in the environment. They are used as indicators that other potentially harmful bacteria may be present.
- (j) Turbidity is a measure of the cloudiness of the water. It is a good indicator of water quality but has no health effects. High turbidity can hinder the effectiveness of disinfectants and act as a medium for microbial growth. MCL for Entry Points is the average of two consecutive days. Entry point data are individual sample measurements; Distribution System data is representative of the monthly distribution system average.
- (k) MCL for Distribution samples is the monthly average.
- (l) MCL's for THM's & HAA5 are the calculated Locational Running Annual Average (LRAA). It represents the average of the four quarters of sampling results. Data presented are the range of individual locational sampling results and the Locational Running Annual Average at the location having the highest concentration of disinfection byproducts.
- (m) Calcium contributes to the total hardness of water. Hardness is a measure of dissolved calcium and magnesium in the water. It is measured as mg/L as CaCO₃. Our drinking water is considered "soft". In general, surface waters such as NYC water are softer than groundwater (well water).
- (n) Estimated value on an analyte found below the calibration range and/or above the detection.
- (o) 24 Repeat samples were taken. All were negative. Lab determination was a bio-film.

About TTHMs (Total Trihalomethanes): The sum of the concentration of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. They are formed as a result of chlorine combining with the natural organics in water.

About HAA5 (Haloacetic Acids): The sum of the concentration of mono-, di-, and trichloroacetic acids, and mono-, and dibromoacetic acids. They are also formed when chlorine reacts with the natural organics in water.

About Lead: Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Board of Water Supply 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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants. The MRDL for Chlorine is 4.0 ppm.

Maximum Residual Disinfectant Level Goal (MRDLG): 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 disinfectant use to control microbial contamination. For Chlorine the MRDLG is 4 ppm.

Water Conservation

Water is a vital resource. We all recognize the need to conserve water during times of drought. It is just as important to use water wisely when the supply is plentiful. Careful use of water can result in less money spent on water, energy, and wastewater treatment. Some common sense measures to conserve water include:

- *Shut faucets off tightly. A small drip can waste 25 gallons per day.**
- *Check all toilets for leakage by putting a few drops of food coloring in the tank. Wait 10 to 15 minutes without flushing. If color shows up in the bowl, you have a leak. A bad toilet leak can waste as much as 200 gallons a day.**
- *Don't run the faucet to get a cold drink. Place a container of water in the refrigerator.**
- *Don't run the faucet while shaving or brushing your teeth.**
- *Take shorter showers and half-full baths. Install low flow showerheads and faucets.**
- *Run washing machine and dishwasher only when full. Do not wash dishes under a running faucet.**
- *When cleaning, use a pail or basin instead of running water.**
- *Use your water meter to detect hidden leaks. Turn off all taps and water using appliances, and then check the meter. Check it again after 15 minutes. If it moved, you have a leak.**
- *Do not cut the lawn too short; longer grass saves water.**
- *Water your lawn early in the morning or in the evening to reduce water loss by evaporation. Don't overwater.**
- *Mulch around trees and plants to help retain moisture.**

(The bacteria *Escherichia coli* (associated with human and animal fecal waste) was not found in the distribution system. In addition, we monitored entry point samples for inorganic contaminants that were not detected. These include antimony, arsenic, beryllium, cadmium, total chromium, mercury, molybdenum, nitrite, lead, thallium, selenium, silver, vanadium, and zinc. Organic contaminants that were tested for and not detected in the source water include 3-Hydroxycarbofuran, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,4,5-T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl) adipate, bis(2-Ethylhexyl) phthalate, Hexachlorobenzene, Hexachlorocyclopentadiene, Simazine, 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-chlorotoluene, 4-chlorotoluene, Bromoform, Dibromochloromethane, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methyl tert-butyl ether (MTBE), Methylene Chloride, n-butylbenzene, n-propylbenzene, Naphthalene, o-xylene, p-xylene, m-xylene, p-isopropyltoluene, SEC-butylbenzene, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, and Vinyl chloride. In 2009, the following Unregulated Contaminants (under UCMR 2) were tested for and not found in the source water: 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 4,4-DDE, Acetochlor, EPTC, Molinate, and Terbacil. In 2013 and 2014, under UCMR 3, the following contaminants were tested for and not found in entry point and / or distribution samples: chromium (total), cobalt, molybdenum, vanadium, 1,4-dioxane, 1,1-dichloroethane, 1,2,3-trichloropropane, 1,3-butadiene, bromochloromethane, bromomethane, chlorodifluoromethane, chloromethane, perfluorobutanesulfonic acid, perfluoroheptanoic acid, perfluorohexanesulfonic acid, perfluorononanoic acid, perfluorooctanoic acid, and perfluorooctanesulfonic acid. The purpose of all UCMR monitoring is to provide assessment and occurrence data to support future decisions relating to the regulation of these contaminants.)

In 2010, the NYSDOH waived the source monitoring requirement (every 18 months) for the following Pesticides, Herbicides, and Dioxin: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Diquat, Endothal, Glyphosate, and 2,3,7,8-TCDD (Dioxin). UCMR 4 2019 Germanium, alpha-Hexachlorocyclohexane, Chlorpyrifos, Dimethipin, Ethoprop, Oxyfluorfen, Profenofos, Tebuconazole, Permethrin, cis&trans, Tribufos, Butylated hydroxyanisole, o-Toluidine, Quinoline, 1-Butanol, 2-Propen-1-ol, Dibromoacetic, Monobromoacetic, Monochloroacetic, Tribromoacetic.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu' un qui le comprend bien.

La relazione contiene importante informazione sulla qualita dell' acqua della comunita. Tradurlo o parliamo con un amico che lo comprenda.

O relatório contem informações importantes sobre a qualidade da água da comunidade. Traduza-o ou peça ajuda de uma pessoa amiga para ajuda-lo a entender melhor.

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