

**Quality on Tap**  
**Annual Drinking Water Quality Report**  
**Manchester Utilities Authority**  
**For the Year 2019**  
**Public Water System ID # 1603001**  
**Issued June 2020**

We are pleased to present to you the Annual Drinking Water Quality Report for the year 2019. This report is designed to inform you about the quality of water and services we have been delivering to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We continually work to improve our facilities and are committed to ensuring the quality of your water.

**We are pleased to report that our drinking water is safe and meets federal and state requirements.**

This annual Consumer Confidence Report (CCR), required by the Safe Drinking Water Act (SDWA), provides additional information on our sources of supply and the quality of the water. For more information on this report or about the next opportunity for public participation in decisions concerning your drinking water, please contact:

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You can also visit the Authority's web site at [www.muawater.net](http://www.muawater.net)

Regular meetings of the Manchester Utilities Authority are held on the second Monday of each month at 7:30 PM at the Haledon Municipal Building, 510 Belmont Avenue, Haledon, New Jersey.

## OVERVIEW

The Manchester Utilities Authority provides an average of 0.82 million gallons of water each day to its customers. It delivers surface water purchased from the Passaic Valley Water Commission (PVWC). The PVWC supplies the Authority with a blended supply from the North Jersey District Water Supply Commission's (NJDWSC) Wanaque Treatment Plant and from the PVWC Little Falls Treatment Plant, which diverts water from the Passaic River.

The water received from both sources is extensively treated and filtered prior to distribution to the PVWC service area, which includes the Manchester Utilities Authority. The Authority receives its water from the PVWC at the Burhans Ave. Pumping Station. The water is treated with orthophosphate by PVWC at the pumping station to reduce its corrosiveness and lessen the amount of lead and copper that may leach from home plumbing fixtures.

### **Safeguarding Our Water**

As water travels over the land or underground, it is subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. All drinking water, including bottled water, may be reasonably expected to contain at

least small amounts of some constituents. *It is important to remember that the presence of these constituents does not necessarily pose a health risk.* More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Waters Hotline (1-800-426-4791).

The Manchester Utilities Authority regularly monitors the quality of water throughout the distribution system in accordance with Federal and State Laws. This is all done by fully certified NJDEP and EPA certified Water Quality Laboratories.

**What Do The Following Tables Mean?**

The tables below show the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019. The table contains the name of the substance found, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination footnotes explaining our findings, and a key to units of measurements. Please note that we have provided three tables for your use. The first set of tables displays the results of the analyses made on samples collected from the Manchester Utilities Authority distribution system. The second set of tables displays the results of the analyses made by the PVWC and analyses made by the NJDWSC.

**Table of Contaminants**

**Some people may be more vulnerable to contaminants 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 drinking water from their health providers. EPA/CDC guidelines on the appropriate means to lessen the risk of infections by cryptosporidium and other microbial contaminants are available from the EPAs Safe Drinking Water Hotline at 800-426-4791.**

**The MCL’s listed in the following tables are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.**

Table 1  
**Manchester Utilities Authority Water Quality Report**

**Microbiological Contaminants**

<b>Regulated Contaminant</b>	<b>Units</b>	<b>COMPLIANCE ACHIEVED</b>	<b>MCL G</b>	<b>MCL</b>	<b>Highest Level</b>	<b>Source of Contamination</b>
Total Coliform Bacteria	Presence /Absence	Yes	0	Less than 5% of monthly samples are positive	0	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

## REGULATED DISINFECTANTS and DISINFECTION BYPRODUCTS

**Stage 2 Disinfection Byproducts, Note: Stage 2 DBP compliance is based on the locational running average (LRAA) calculated at each monitoring location.**

Regulated Contaminant	UNIT	COMPLIANCE ACHIEVED	MCL LRAA	Highest Detected	Range Detected	Source of Contamination/ and Comments
Total Trihalomethanes (TTHM) Stage 2	PPB	Yes	80	60	34 - 74	Byproduct of water disinfection. / TTHM compliance is based on Locational Running Annual Average.
Haloacetic Acids (HAA5) Stage 2	PPB	Yes	60	31	18 - 35	Byproduct of water disinfection. / HAA5 compliance is based on Locational Running Annual Average.

### Disinfectants

Regulated Contaminant	Units	COMPLIANCE ACHIEVED	MRDLG	MRDL	Highest Detected	Range Detected	Source of Contamination
Chlorine as CL2 (Running avg.)	PPM	Yes	4	4	1.37	0.87 – 1.37	Chlorine is used as a drinking water disinfectant.

### Lead and Copper (2018 results, next sampling is 2021.)

Regulated Contaminant	Units	MCLG	MCL	Compliance Achieved	90 <sup>th</sup> Percentile	Highest Level	Source of Contamination
Copper	mg/L	1.3	AL=1.3	Yes	0.0759	0.08	Corrosion of household plumbing systems
Lead	mg/L	0	AL=0.015	Yes	0.00079	0.00176	Corrosion of household plumbing systems

COMPLIANCE WITH THE LEAD AND COPPER RULE IS BASED ON THE 90<sup>TH</sup> PERCENTILE RESULT FROM POINTS OF USE IN THE DISTRIBUTION SYSTEM.

### Secondary Contaminants:

Regulated Contaminant	Units	RUL Achieved	RUL	Highest Detected	Range Detected	Source of Contamination
Iron	PPM	No	0.3	0.3	NA	Erosion of natural deposits, discharge of drilling waste and discharge from metal refineries.
Manganese	PPM	Yes	0.05	0.00813	NA	Erosion of natural deposits.

## ADDITIONAL INFORMATION

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for asbestos and synthetic organic chemicals.

**PASSAIC VALLEY WATER COMMISSION (PVWC) PWS ID NJ1605002  
And North Jersey District Water Supply (NJDWSC) PWS ID NJ1613001  
2019 WATER QUALITY DATA**

				Water Treatment Plant Results		
PRIMARY CONTAMINANTS	Compliance Achieved	MCLG	MCL	PVWC Little Falls WTP PWS ID NJ1605002	NJDWSC Wanaque WTP PWS ID NJ1613001	TYPICAL SOURCE
<b>TURBIDITY AND TOTAL ORGANIC CARBON</b>				<b>Highest Result (Range of Results)</b>	<b>Highest Result (Average)</b>	
Turbidity, NTU*	PVWC = Yes NJDWSC^= No	NA	TT = 1	0.34 (0.017 - 0.34)	2.1^ (0.09 average)	Soil runoff.
	Yes	NA	TT = percentage of samples <0.3 NTU (min 95% required)	<b>Lowest Monthly Percentage of Samples Meeting the Turbidity Limits</b>		
				100%	98.6%	
^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.						
* 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.						
Total Organic Carbon, %	Yes	NA	TT = % removal; or removal ratio	<b>Percent (%) Removal</b>	<b>Removal Ratio</b>	Naturally present in the environment.
				58 - 100 (25 - 50 required)	1.1 (RAA) 1.0 - 1.3	
<b>INORGANIC CONTAMINANTS</b>				<b>Highest Result (Range of Results)</b>	<b>Highest Result</b>	
Barium, ppm	Yes	2	2	Less than 0.10	0.0069	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride, ppm	Yes	4	4	0.050 (ND - 0.050)	ND	Erosion of natural deposits.
Nickel, ppb	NA	NA	NA	2.53 (ND - 2.53)	ND	Erosion of natural deposits.
Nitrate, ppm	Yes	10	10	2.81 (ND - 2.81)	0.155	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

**WAIVER INFORMATION**

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. NJDWSC was granted a monitoring waiver for synthetic organic chemicals for the 2017-2019 monitoring period by NJDEP. PVWC received a monitoring waiver for all of the synthetic organic contaminants except for the contaminant Di(2-Ethylhexyl)Phthalate for the 2017-2019 monitoring period.

**SOURCE WATER ASSESSMENT**

NJDEP has prepared Source Water Assessment reports and summaries for all public water systems. The Source Water Assessment for the PVWC system (PWS ID 1605002), and NJDWSC system (PWS ID 1613001) can be obtained by accessing NJDEP's source water assessment web site at <http://www.nj.gov/dep/watersupply/swap/index.html> or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550. If a system is rated highly susceptible for a contamination category, it does not mean a customer is – or will be – consuming contaminated water. The rating reflects the potential for contamination of a source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any of those contaminants are detected at frequencies and concentrations above allowable levels. The source water assessments performed on the intakes for each system list the following susceptibility ratings for a variety of contaminants that may be present in source waters:

Intake Susceptibility Ratings	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
PVWC 4 Surface Water	4-High	4-High	1-Medium, 3-Low	4-Medium	4-High	4-Low	4-Low	4-High
NJDWSC 5 Surface Water	5-High	5-High	2-Medium, 3-Low	5-Medium	5-High	5-Low	5-Low	5-High

### CRYPTOSPORIDIUM

*Cryptosporidium* is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are viable or capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal 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, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may spread through means other than drinking water.

PVWC conducted special source water *Cryptosporidium* and *Giardia* monitoring in 2019. The data collected in 2019 is presented in the table below.

### SOURCE WATER PATHOGEN MONITORING

Contaminant	PVWC Plant Intake	Typical Source
<i>Cryptosporidium</i> , Oocysts/L	0 - 0.57	Microbial pathogens found in surface waters throughout the United States.
<i>Giardia</i> , Cysts/L	0 - 1.23	

### UNREGULATED CONTAMINANTS FOR WHICH EPA REQUIRES MONITORING

Contaminant	PVWC Intake Average (Range of Results)	PVWC Little Falls WTP Average (Range of Results)
Bromide, ppb	44 (33 - 69)	
Total Organic Carbon, mg/L	6 (4 - 7)	
Manganese (Total), ppb		8 (2 - 14)

Unregulated contaminants are those for which EPA requires monitoring but has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

### SECONDARY PARAMETERS – TREATMENT PLANT EFFLUENT

Contaminant	N.J. Recommended Upper Limit (RUL)	PVWC Little Falls WTP PWSID NJ1605002		NJDWSC Wanaque WTP PWSID NJ1613001	
		Range of Results	RUL Achieved	Result	RUL Achieved
ABS/LAS, ppb	500	ND - 60	Yes	ND	Yes
Alkalinity, ppm	NA	28 - 80	NA	40	NA
Aluminum, ppb	200	20 - 42	Yes	28	Yes
Chloride, ppm	250	48 - 161	Yes	44	Yes
Color, CU	10	Less than 5	Yes	2	Yes
Hardness (as CaCO <sub>3</sub> ), ppm	250	58 - 172	Yes	43	Yes
Hardness (as CaCO <sub>3</sub> ), grains/gallon	15	3 - 10	Yes	3	Yes
Iron, ppb	300	Less than 100	Yes	17	Yes
Manganese, ppb	50	ND - 211	No	18	Yes
Odor, TON	3	2 - 9	No	ND	Yes
pH	6.5 to 8.5 (optimum range)	8.1 - 8.4	Yes	8.09	Yes
Sodium, ppm	50	28 - 115	No*	23	Yes
Sulfate, ppm	250	9 - 82	Yes	6	Yes

Total Dissolved Solids, ppm	500	190 - 561	No	118	Yes
Zinc, ppb	5,000	Less than 40	Yes	10	Yes

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.**

**\* PVWC FINISHED WATER EXCEEDS SODIUM RUL**

PVWC's finished water was above New Jersey's Recommended Upper Limit (RUL) of 50 ppm for sodium in 2019. Possible sources of sodium include natural soil runoff, roadway salt runoff, upstream wastewater treatment plants, and a contribution coming from chemicals used in the water treatment process. 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, sodium levels above the recommended upper limit may be a concern to individuals on a sodium-restricted diet. If you have any concerns please contact your health care provider.

**ADDITIONAL PVWC TREATMENT PLANT MONITORING RESULTS**

Detected Contaminants, ppb	Little Falls WTP Effluent Range of Results	
Chlorate	(35 - 413)	Test results presented in this table were collected in 2019 as part of a study to determine the general occurrence of these contaminants. PVWC continues to participate in, and support these types of regulatory and research efforts to maintain a position of leadership in drinking water supply.
1,4-Dioxane	(ND - 0.09)	
Perfluorobutanesulfonic acid (PFBS)	(ND - 0.0021)	There are currently no EPA drinking water standards in effect for these contaminants although EPA has established health advisory levels for some of these to provide an estimate of acceptable drinking water levels based on health effects information.
Perfluoroheptanoic acid (PFHpA)	(ND - 0.0027)	
Perfluorohexanesulfonic acid (PFHxS)	(ND - 0.0029)	EPA has published Health Advisory levels for Perfluorooctanoic acid, (PFOA) and Perfluorooctanesulfonic acid, (PFOS), of 0.070 parts per billion (ppb) combined.
Perfluorohexanoic acid (PFHxA)	(ND - 0.0054)	
Perfluorooctanesulfonic acid (PFOS)	(ND - 0.0086)	Health advisory levels are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.
Perfluorooctanoic acid (PFOA)	(0.0039 - 0.010)	

**DEFINITIONS of TERMS and ACRONYMS**

**ABS/LAS:** Alkylbenzene Sulfonate and Linear Alkylbenzene Sulfonate (surfactants)

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

**CU:** Color unit

**Disinfection By-product Precursors:** A common source is naturally-occurring organic material in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (DBP precursors) present in surface water.

**EPA: United States Environmental Protection Agency**

**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.

**Microbial Contaminants/Pathogens:** Disease-causing organisms such as bacteria, protozoa, 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 above the minimum reporting level.

**NJDEP:** New Jersey Department of Environmental Protection

**NJDWSC:** North Jersey District Water Supply Commission

**NTU:** Nephelometric Turbidity Unit

**Nutrients:** Compounds, minerals and elements that aid growth, which can be either naturally occurring or man-made. Examples include nitrogen and phosphorus.

**ppb:** parts per billion (approximately equal to micrograms per liter)

**ppm:** parts per million (approximately equal to milligrams per liter)

**PWS ID:** Public Water System Identification

**PVWC:** Passaic Valley Water Commission

**RAA:** Running Annual Average

**Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment.

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

**RUL Achieved:** A "YES" entry indicates the State-recommended upper limit was not exceeded. A "NO" entry indicates the State-recommended upper limit was exceeded.

**TON:** Threshold Odor Number

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

**WTP: Water Treatment Plant**

## ADDITIONAL INFORMATIONAL RESOURCES

EPA Drinking Water website: [www.epa.gov/safewater](http://www.epa.gov/safewater)

NJDEP Water Supply website: [www.nj.gov/dep/watersupply](http://www.nj.gov/dep/watersupply)

American Water Works Association (AWWA) website: [www.awwa.org](http://www.awwa.org)

EPA Safe Drinking Water Hotline: 800-426-4791

NJDEP Bureau of Safe Drinking Water: 609-292-5550

AWWA New Jersey Section website: [www.njawwa.org](http://www.njawwa.org)

## **INFORMATION ABOUT DRINKING WATER CONTAMINANTS**

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 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.

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

Lead & Copper - In 2018 the Manchester Utilities Authority collected 30 samples from residences throughout the distribution system for lead and copper. The number reported is the 90<sup>th</sup> percentile or more correctly the highest sample reported for the 27<sup>th</sup> sample. Based on the 2018 results the Authority does not anticipate having to collect samples from residences again until 2021.

This booklet contains important information about the water in your community. Translate or speak to someone who understands it well.

El informe contiene informacion importante sobre calidad del agua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.

La relazione contiene importanti informazioni su la del qualita del acqua de Ia Comunita. Tradurlo o parlatelo con un amico che lo comprenda.

## **Health Effects of Detected Contaminants:**

- (1) *Turbidity*. Turbidity has no health risk effects. However, turbidity can interfere with disinfecting and provide a medium for biological growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as cramps, nausea, diarrhea, and associated headaches.

### **Radioactive Contaminants/Inorganic Contaminants**

- (2) *Copper*. Copper is an essential nutrient, but some people who drink water-containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.
- (3) *Lead*. Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems and high blood pressure.
- (4) *Sodium* – PVWC was above New Jersey's recommended upper limit (RUL) for Sodium. 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, sodium levels above the may be of concern to individuals on a sodium restricted diet.

### **Volatile Organic Contaminants**

- (5) *TTHMs (Total Trihalomethanes)*. Some people who drink water-containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased chance of getting cancer.

## **SPECIAL CONSIDERATIONS REGARDING CHILDREN, PREGNANT WOMEN, NURSING MOTHERS, AND OTHERS**

Children may receive a slightly higher amount of contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the case of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

### **Additional Special Notice on Lead**

***Lead:*** Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels at your home may be higher than at other homes in your community as a result of materials used in your home plumbing. If you are concerned about elevated lead levels in your home water, you may wish to have your tap water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the SAFE DRINKING WATER HOT LINE (1-800-426-4791) Adults who drink this water over many years could develop kidney problems and high blood pressure.

**WATER SUPPLIED BY THE MANCHESTER UTILITIES AUTHORITY IS IN COMPLIANCE WITH LEAD AND COPPER BASED ON THE 90<sup>TH</sup> PERCENTILE RESULT. ALL INDIVIDUAL LEAD AND COPPER SAMPLES WERE ALSO BELOW THE ACTION LEVEL.**

## **QUESTIONS & ANSWERS**

### **Why is there Chlorine in my water?**

A century ago, acute diseases such as typhoid fever and cholera were a very real threat to our health because the microorganisms that caused these diseases were found in the public drinking water. However, for over 100 years, water suppliers in America and other countries have used chlorine to treat or disinfect drinking water. According to the U.S. Environmental Protection Agency and other health agencies, chlorine is currently one of the most effective disinfectants to kill harmful microorganisms. Disinfection of all public water supplies is required by federal and state laws and regulations, including the Safe Drinking Water Act and the Surface Water Treatment Rule.

### **Does the Manchester Utilities Authority add fluoride to my drinking water?**

NO. The Manchester Utilities Authority does not add fluoride to the water in your community. However, a small amount of fluoride may occur naturally in your water.

### **Is my water hard or soft?**

Hardness describes the level of dissolved natural minerals (calcium and magnesium) in drinking water. These minerals are an important part of a healthy diet. Hard water may contain more mineral nutrients and less sodium. A gradual build-up of calcium and magnesium in hard water can form harmless, filmy white deposits on faucets, bathtubs, and teakettles. Hard Water also requires more soap to lather fully. The degree of water hardness depends on where you live. The Manchester Utilities Authority water typically has a hardness in a range of 58 to 172 parts per million which is considered soft.

### **My water has a funny taste, it tastes different, or it has a chemical taste.**

Seasonal temperatures as well as the required chlorination of your water supply may affect the taste, odor and color of water.

### **My water is cloudy.**

Is it hot or cold water that is cloudy? If it is cold water, then it could be the need for an aerator to stop air bubbles or clean the existing one. If it's hot water, then the hot water heater needs to be flushed because of mineral deposits.

### **My water is rusty.**

The Manchester Utilities Authority is probably in your neighborhood flushing hydrants or possibly there is a main break. Hydrant flushing is a process through which water is forced through the mains to dislodge small particles of rust and sediment that have built up over time. This sediment does not affect the water purity, but can cause the water to become discolored. The water is safe to drink and the discoloration often disappears within a short time.

### **When is my water tested?**

The Manchester Utilities Authority regularly monitors the quality of your drinking water as required by the EPA and the NJDEP and follows all regulations as set forth in the Safe Drinking Water Act. Samples are taken from the distribution system and from the Burhans Avenue Pump Station, the Point of Entry for the water supplied by the PVWC. In addition the PVWC and the NJDWSC regularly monitor the water supply for hundreds of different compounds.

The minimum testing schedule followed by Manchester Utilities Authority is as follows:

Total Coliform – Ten samples per month from the distribution system. Ten samples are required.

Free Chlorine Residual:

- Ten samples per month from the distribution system. Ten samples are required.
- Daily at the POE

Orthophosphate (Corrosion Inhibitor)

- Seven samples per month from the distribution system
- Weekly at the POE

Lead and Copper – Thirty samples, once every three years, from points of use in the distribution system  
Total THM's – Quarterly, four sample taken from the points of maximum residence time in the system.  
HAA5 - Quarterly, four samples taken from the points of maximum residence time in the system.

## Current Water Issues

*TTHMs (Total Trihalomethanes)*. The Manchester Utilities Authority currently satisfies the TTHM MCL based on running annual average at all four of its sampling locations. However, occasionally individual samples from some locations are higher. The Authority has modified its hydrant flushing program to enhance the removal of sediment that is a factor in the formation of TTHMs and is investigating additional actions to reduce the maximums observed.

Water Quality Assurance Act (WQAA). New Jersey public water systems, including that operated by the Authority, have to regularly exercise fire hydrants and valves and have a program to maintain all of the assets needed to deliver water to their customers. We are engaged in satisfying all WQAA requirements pertinent to our system.

We at the Manchester Utilities Authority work hard to provide top quality water to every tap. We ask that all of our customers help us to protect our water sources, which are the heart of the community, our way of life and our children's future.

If you have any questions or would like a hard copy of this report, please call our office at (973)-942-6538 x 3.

### ADDITIONAL INFORMATIONAL RESOURCES

EPA Drinking Water website: [www.epa.gov/safewater](http://www.epa.gov/safewater)  
NJDEP Water Supply website: [www.nj.gov/dep/watersupply](http://www.nj.gov/dep/watersupply)  
American Water Works Association (AWWA) website: [www.awwa.org](http://www.awwa.org)

EPA Safe Drinking Water Hotline: 800-426-4791  
NJDEP Bureau of Safe Drinking Water: 609-292-5550  
AWWA New Jersey Section website: [www.njawwa.org](http://www.njawwa.org)