Table 1

Annual Drinking Water Quality Report for 2020
City of North Tonawanda Public Water System
216 Payne Ave., Room #6, North Tonawanda, NY.14120
(Public Water Supply ID #NY3100572)

INTRODUCTION

To comply with State regulations, City of North Tonawanda Public Water System, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, we conducted tests for over 110 contaminants. We detected 111 of those contaminants, and only found 1 of those contaminants at one location during one quarterly period at a level higher than the State allows. Our water temporarily exceeded a drinking water standard, and we plan to rectify the problem by flushing a water main that was experiencing low demand. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Water Department Business Offices at, Phone# 716-695-8560. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Common Council meetings. The meetings are held on the first and third Tuesday of every month in the Common Council Chambers at City Hall, 216 Payne Avenue, North Tonawanda, NY.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which 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.

Our water source is surface water drawn from the Niagara River. Our business offices are located at 830 River Road, in the City of North Tonawanda, NY. During 2020, our system did not experience any restriction of our water source. Our intake pipe is located on the East branch of the Niagara River. This intake pipe delivers a supply of Raw water to the North Tonawanda Water Treatment Plant that is rated at a maximum capacity of 12 MGD (Million Gallons per Day). The Plant has a physical treatment process, which includes a Rapid Mixer (for Alum distribution), Coagulation, Flocculation, Sedimentation (settling of suspended solids), and Filtration (filtering out of solids). Chemical processes include Aluminum Sulfate (settling of suspended solids), Chlorine (disinfection), and Fluoride (strong teeth). The finished water is stored in a one million gallon clear well, prior to distribution.

Table 1 provides a list of contaminants which may be detected at your water system. This table lists each of the contaminants you are required to test for under Part 5, as well as additional contaminants that may be detected in your drinking water. It should be noted that you might not have tested for many of the contaminants listed on this table. Conversely, you may detect contaminants in your drinking water system that are not listed on this table. If you detect, a contaminant that is not listed in Table 1, please contact the State Health Department at (518) 402-7650 to obtain contaminant specific information.

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CITY OF NORTH TONAWANDA SWAP SUMMARY

The New York State Department of Health recently completed a draft Source Water Assessment of the supplies **raw water source** under the States Source Water Assessment Program (SWAP). The purpose of this program is to compile, organize, and evaluate information regarding possible and actual threats to the quality of public water supply (PWS) sources. It is important to note that source water assessment reports estimate the **potential** for untreated drinking water sources to be impacted by contamination. These reports do not address the safety or quality of treated finished potable tap water. The Great Lakes' watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g., zebra mussels - intake clogging and taste and odor problems). The SWAP is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at this public water supply raw water intake. This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of residential land in the assessment area results in elevated potential for microbials, disinfection byproduct precursors, turbidity and pesticides contamination. There is also a high density of sanitary wastewater discharges, which results in elevated susceptibility for numerous contaminant categories. Non-sanitary wastewater could also impact source water quality. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: Chemical Bulk Storage facilities, Inactive Hazardous Waste Sites, Landfills, Toxic Release Inventory data, Municipally Operated Sewage Facilities and Resources Conservation and Recovery Act (RCRA) facilities.

FACTS AND FIGURES

Our water system serves 30,372 people through 11,740 service connections. The total water produced in 2020 was 1.505 billion gallons. The daily average of water treated and pumped into the distribution system was 4.112 million gallons per day. Our highest single day was 6.22 million gallons. The amount of water delivered to customers was 704.312 million gallons. This leaves an unaccounted-for total of 800.688 million gallons. This water was used to flush mains, fight fires and leakage, accounts for the remaining 800.688 million gallons (53% of the total amount produced). In 2020, water customers were charged $3 per 1,000 gallons of water and the annual average water charge per user was $300.00.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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) or the Niagara County Health Department at 716 439-7430.

Table 1 provides a list of contaminants which may be detected at your water system. This table lists each of the contaminants you are required to test for under Part 5, as well as additional contaminants that may be detected in your drinking water. It should be noted that you might not have tested for many of the contaminants listed on this table. Conversely, you may detect contaminants in your drinking water system that are not listed on this table. If you detect, a contaminant that is not listed in Table 1, please contact the State Health Department at (518) 402-7650 to obtain contaminant specific information.

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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language
Microbiological Contaminants								
Total Coliform Bacteria	No	2020	<1 <1-42	n/a[1]	TT = 2 or more positive samples after April 1, 2016. MCL= 2 or more positive samples before April 1, 2016.[2]	0	Naturally present in the environment.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
Turbidity (as a treatment technique for systems that filter and use turbidity as an indicator of filtration performance – include the highest single measurement **and** the lowest monthly percentage of samples meeting the specified turbidity limits). Conventional Filtration	No	2020	0.56 100%	NTU	TT-0.3 TT-1.0	N/A	Soil Runoff.	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. Please pay special attention to the additional statement in this document regarding Cryptosporidium.
Total organic carbon Raw water Finished water	 No No	 2020 2020	 2.1 1.6-2.4 1.8 1.6-2.1	mg/l	TT	N/A	Naturally present in the environment.	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These products include Trihalomethanes (THMs) and Haloacetic Acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

[1] N/A means not applicable.

[2] Before April 1, 2016, a violation occurs at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive. A violation occurs at systems collecting less than 40 samples per month when two or more samples are total coliform positive. After April 1, 2016, a Level 1 assessment is triggered if 2 or more routine/repeat samples are total coliform positive in the same month.

[3] A violation occurs when a total coliform positive sample is positive for *E. Coli* and a repeat total coliform sample is positive or when a total coliform positive sample is negative for *E. Coli* but a repeat total coliform sample is positive and the sample is also positive for *E. Coli.*

[4] NTU – Nephelometric Turbidity Unit; a measure of particles in water.

[5] A MCL violation occurs when the average of all daily entry point analyses for the month exceeds the MCL rounded off to the nearest whole number

[6] A violation occurs when the average of two consecutive daily entry point analyses exceeds the MCL rounded off to the nearest whole number.

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Radioactive Contaminants								
Gross alpha activity (including radium – 226 but excluding radon and uranium)	No	8/17	-0.288+/- 0.523	PCi/L[9]	15[10]	0	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium – 226 and 228	No	8/17	.430+/-.302 .829+/- .431	Pci/L	5[10]	0	Erosion of natural deposits.	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium	No	8/17	0.311+/-0.011	ug/l	30 [10]	0	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer.
Inorganics[11]								
Barium	No	12/20	0.020	mg/l[15]	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Chloride	No	12/20	19.0	mg/l	250	N/A	Naturally occurring or indicative of road salt contamination.	Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter, and is based on chloride's effects on the taste and odor of the water.

[8] If beta particles are detected at or below 50 pCi/l, report the detected level in pCi/l. This will provide consumers with a standard against which to compare that detected level, include "50*" in the MCL

column (rather than the actual MCL of 4 mrem/year) and include a footnote to the table that says "The State considers 50 pCi/l to be the level of concern for beta particles." If beta particles are detected

above 50 pCi/l, the water supplier must determine the actual radioactive constituents present in the water to calculate the dose exposure level in mrem/year, and must report both the detected level and

MCL as mrem/year.

[9] Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.

[10] A MCL violation occurs when the annual composite of four quarterly samples or the average of the analysis of four quarterly samples exceeds the MCL.

[11] If the results of a monitoring sample analysis exceed the MCL, the water supplier shall collect one more sample from the same sampling point within two weeks of as soon as practical. An MCL violation occurs when the average (rounded off to the same number of significant figures as the MCL for the contaminant in question) of the two results exceed the MCL.

[12] Million Fibers per Liter (MFL) – million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers

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[13] Micrograms per liter (ug/l) or parts per billion (ppb).

[14] If arsenic is detected above 5 ug/l, but below 10 ug/l (the MCL) your Annual Water Quality Report must contain the following statement: “NYS and EPA have promulgated a drinking water arsenic standard.

of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic’s possible health effects

against the costs of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high

concentrations and is linked to other health effects such as skin damage and circulatory problems.”

[15] Milligrams per liter (mg/l) or parts per million (ppm).

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Copper	No	2020	.028 0.0059-0.18	mg/l	AL = 1.3[16]	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.	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.
Fluoride	No	2020	0.67 0.32-0.87	mg/l	2.2	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
Lead	No	2020	6.8 <0.17-13.0	ug/l	AL= 15[16]	0	Corrosion of household plumbing systems; Erosion of natural deposits.	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 or high blood pressure.
Sodium	No	12/20	10	mg/l	(see Health Effects)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.	Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
Sulfate	No	12/20	26	mg/l	250	N/A	Naturally occurring.	Drinking water containing high concentrations of sulfate can cause short-term intestinal effects in humans. The effects can range from a laxative effect (loose stools) to diarrhea (unusually frequent and liquid bowel movements). Diarrhea is of particular concern in infants, because it can lead to more serious effects such as dehydration. Travelers or new residents, who may change from drinking water with low sulfate concentrations to drinking water with high sulfate concentrations, may experience short term intestinal effects due to sulfate. The New York State standard for sulfate is 250 milligrams per liter, and is based on sulfate's effects on the taste and odor of the water.

[16] Include the 90th percentile value for the most recent sampling, the number range of detections, and the number of sites that exceeded the action level. If lead is detected above 15 ug/l (the Action Level) in more than 5%, but fewer than 10%, of the sites sampled [if your system samples fewer than 20 sites and has even one sample above the AL, you will need to include the standard explanation for an AL exceedance], your Annual Water Quality Report must include the following statement: "If present, 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 City of North Tonawanda 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*.

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Odor	No	12/20	4.0	Units TON	3	N/A	Organic or inorganic pollutants originating from municipal and industrial waste discharges; natural sources.	Odor as measured by this standard procedure has no health effects; although several contaminants exert odors when they are present at levels near their MCLs. Odor is an important quality factor affecting the drinkability of water.
Inorganics – Nitrate and Nitrite[18]								
Nitrate	No	4/2020	0.19	mg/l	10[19]	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
Synthetic Organic Contaminants including Pesticides and Herbicides								
Alachlor	No	6/20	<0.032	ug/l	2	0	Runoff from herbicide used on row crops.	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
Aldicarb	No	6/20	<0.50	ug/l	3	1	Runoff from insecticide use on row crops.	Some people who drink water containing aldicarb in excess of the MCL over many years could experience neurological effects such as sweating, papillary constriction and leg weakness.
Aldicarb sulfone	No	6/20	<0.25	ug/l	2	1	Runoff from insecticide use on row crops.	Some people who drink water containing aldicarb sulfone in excess of the MCL over many years could experience neurological effects such as sweating, papillary constriction and leg weakness.
Aldicarb sulfoxide	No	6/20	<0.25	ug/l	4	1	Runoff from insecticide use on row crops.	Some people who drink water containing aldicarb sulfoxide in excess of the MCL over many years could experience neurological effects such as sweating, papillary constriction and leg weakness.
Atrazine	No	6/20	0.045	ug/l	3	3	Runoff from herbicide used on row crops.	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
Benzo(a)pyrene (PAH)	No	6/20	<28.0	ng/l[21]	200	0	Leaching from lining of water storage tanks and distribution lines.	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

[18] If the analytical results exceed the MCL, the water supplier shall collect another sample from the same sampling point, within 24 hours of the receipt of results or as soon as practical. An MCL violation occurs when the average of the two results exceeds the MCL.

[19] If nitrate is detected above 5 mg/l, but below 10 mg/l (the MCL), your Annual Water Quality Report must contain the following statement: "Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

[20] Each public water system must certify annually in writing to the State that when Acrylamide and Epichlorohydrin are used in drinking water systems, the commination (or product) of dose and monomer level does not exceed the levels specified as follows: (1) Acrylamide = 0.05% dosed at 1 mg/l (or equivalent); and (2) Epichlorohydrin – 0.01% dosed at 20 mg/l (or equivalent).

[21] Nanograms per liter (ng/l) or parts per trillion (ppt).

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Carbofuran	No	6/20	<0.25	ug/l	40	40	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
Chlordane	No	6/20	< 0.1	ug/l	2	n/a	Residue of banned termiticide.	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
Dalapon	No	6/20	< 1.0	ug/l	50[22]	n/a	Runoff from herbicide used on rights of way.	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
1,4-Dioxane	No	11/20	< 0.07	ug/l	1	n/a	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.	Laboratory studies show that 1,4-dioxane caused liver cancer in animals exposed at high levels throughout their lifetime. Whether 1,4-dioxane causes cancer in humans is unknown. The United States Environmental Protection Agency considers 1,4-dioxane as likely to be carcinogenic to humans based upon studies of animals exposed to high levels of this chemical over their entire lifetimes.
2,4-D 2,4-Dichlorophenoxyacetic	No	6/20	< 0.1	ug/l	50	n/a	Release to the environment by its application as a pesticide used to control broad leaf needs in agriculture and for control of woody plants along roadsides, railways, and utility rights-of-way.	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
Di(2-ethylhexyl)adipate	No	6/20	<0.58	ug/l	50	n/a	Discharge from chemical factories.	Some people who drink water containing di(2-ethylhexyl)adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
Di(2-ethylhexyl)phthalate Bis(2-ethylhexyl)phthalate) (DEHP)	No	6/20	<0.58	ug/l	6	0	Used in plastic products such as polyvinyl chloride, plastic toys, vinyl upholstery, adhesives and coatings. Compound likely to be released to the environment during production and waste disposal of these products. Also used in inks, pesticides, cosmetics and vacuum pump oil.	Some people who drink water containing di(2-ethylhexyl)phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
Dibromochloropropane (DBCP) (1,2-Dibromo-3-Chloropropane)	No	6/20	<0.0024	ng/l	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.

[22] Unspecified Organic contaminant classification as defined in 10 NYCRR Part 5.

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Dinoseb (4,6-dinitro-2-sec-butylphenol)	No	6/20	< 0.1	ug/l	7	7	Runoff from herbicide used on soybeans and vegetables.	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
Diquat	No	6/20	< 0.4	ug/l	20	20	Runoff from herbicide use.	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
Dioxin (2,3,7,8-TCDD)	No	6/20	<0.25	pg/l[23]	30	0	Emission from waste incineration and other combustion; Discharge from chemical factories.	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Endothall	No	6/20	< 9.0	ug/l	50[22]	n/a	Runoff from herbicide use.	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
Endrin	No	6/20	<0.070	ug/l	2	2	Residue of banned insecticide.	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
Ethylene dibromide (EDB) (1,2-Dibromomethane)	No	6/20	<2.5	ng/l	50	0	Discharge from petroleum containing banned additive; Soil fumigant.	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Glyphosate	No	6/20	<5.0	ug/l	50[22]	700	Runoff from herbicide use.	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Heptachlor	No	6/20 6/20	<52	ng/l	400	0	Residue of banned pesticide.	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
Heptachlor epoxide	No	6/20	<170	ng/l	200	0	Breakdown of heptachlor.	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
Hexachlorocyclopentadiene	No	6/20	<0.041	ug/l	5[25]	n/a	Discharge from chemical factories.	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their stomach or kidneys.
Lindane	No	6/20	<78	ng/l	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens.	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

[23] Picograms per liter (pg/l) or parts per quadrillion (ppq)

[24] Each public water system must certify annually in writing to the State that when Acrylamide and Epichlorohydrin are used in drinking water systems, the commination (or product) of dose and monomer level does not exceed the levels specified as follows: (1) Acrylamide = 0.05% dosed at 1 mg/l (or equivalent); and (2) Epichlorohydrin – 0.01% dosed at 20 mg/l (or equivalent).

[25] Principal Organic Contaminant classification as defined in 10 NYCRR Part 5.

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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language
Methoxychlor	No	6/20	<0.042	ug/l	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
Oxamyl (Vydate)	No	6/20	<0.37	ug/l	50	n/a	Runoff/leaching from insecticide used on apples, potatoes and tomatoes.	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
Perfluorooctanoic acid (PFOA)	No	11/20	1.7	ng/l	10	n/a	Released into the environment from widespread use in commercial and industrial applications.	PFOA caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.
Perfluorooctane sulfonic acid (PFOS)	No	11/20	1.7	ng/l	10	n/a	Released into the environment from widespread use in commercial and industrial applications.	PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOS in animals.
Pentachlorophenol	No	6/20	< 0.04	ug/l	1	0	Discharge from wood preserving factories.	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys and may have an increased risk of getting cancer.
Picloram	No	6/20	< 0.1	ug/l	50	n/a	Herbicide runoff.	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
Simazine	No	6/20	<0.034	ug/l	4	4	Herbicide runoff.	Some people who drink water containing simazine in excess of the MCL over many years could experience tremors or have problems with their blood.
2,4,5-TP (Silvex)	No	6/20	< 0.1	ug/l	10	n/a	Residue of banned herbicide.	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Toxaphene	No	6/20	< 1.0	ug/l	3	0	Runoff/leaching from insecticide used on cotton and cattle.	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their thyroid, kidneys, or liver and may have an increased risk of getting cancer.

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Volatile Organic Contaminants								
Benzene	No	7/20	<0.082	ug/l	5[25]	0	Discharge from factories; Leaks from gas storage tanks and leaching from landfills.	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets and may have an increased risk of getting cancer.
Carbon tetrachloride	No	7/20	<0.11	ug/l	5[25]	0	Discharge from chemical plants and other industrial activities.	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chlorobenzene	No	7/20	<0.14	ug/l	5[25]	n/a	Discharge from chemical and agricultural chemical factories.	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their kidneys or liver.
(1,2-Dichlorobenzene)	No	7/20	<0.16	ug/l		n/a	Discharge from industrial chemical factories.	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory system.
p-Dichlorobenzene (1,4-Dichlorobenzene)	No	7/20	0.15	ug/l	5[25]	n/a	Discharge from industrial chemical factories.	Some people who drink water containing p-dichlorobenzene in excess over the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
1,2-Dichloroethane	No	7/20	<0.086	ug/l	5[25]	n/a	Discharge from industrial chemical factories.	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
cis-1,2-Dichloroethylene (cis-1,2-Dichloroethene)	No	7/20	<0.090	ug/l	5[25]	n/a	Discharge from industrial chemical factories.	Some people who drink water containing cis-1,2-Dichloroethylene in excess of the MCL over many years could experience problems with their liver.
1,2-Dichloropropane	No	7/20	<0.096	ug/l	5[25]	0	Discharge from industrial chemical factories.	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Ethylbenzene	No	7/20	<0.099	ug/l	5[25]	n/a	Discharge from petroleum refineries; Leaks from gasoline tanks.	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Styrene	No	7/20	<0.089	ug/l	5[25]	n/a	Discharge from rubber and plastic factories; Leaching from landfills.	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Tetrachloroethylene (Tetrachloroethene) (Perchloroethylene)	No	7/20	<0.18	ug/l	5[25]	n/a	Discharge from factories and dry cleaners; Waste sites; Spills.	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver and may have an increased risk of getting cancer.
1,2,4-Trichlorobenzene	No	7/20	<0.12	ug/l	5[25]	n/a	Discharge from textile-finishing factories.	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,1,1-Trichloroethane	No	7/20	<0.15	ug/l	5[25]	n/a	Discharge from metal degreasing sites and other factories.	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language
1,1,2-Trichloroethane	No	7/20	<0.16	ug/l	5[25]	n/a	Discharge from industrial chemical factories.	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
Trichloroethylene (Trichloroethene) (TCE)	No	7/20	<0.13	ug/l	5[25]	0	Discharge from metal degreasing sites and other factories.	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Toluene	No	7/20	<0.086	ug/l	5[25]	n/a	Leaks from gasoline tanks; Discharge from petroleum factories. Leaching of solvent from lining of potable water tanks.	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
m-xylene & p-xylene	No	7/20	<0.015	ug/l	5[25]	n/a	Leaks from gasoline tanks; Discharge from petroleum factories. Leaching of solvent from lining of potable water tanks.	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
o-xylene	No	7/20	<0.086	ug/l	5[25]	n/a	Leaks from gasoline tanks; Discharge from petroleum factories. Leaching of solvent from lining of potable water tanks.	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
Disinfection Byproducts								
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	2020	16.76 8.1-33.0	ug/l	60	n/a	By-product of drinking water disinfection needed to kill harmful organisms.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	2020	45.44 24.0-83.0	ug/l	80	n/a	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.	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								
Chlorine Residual	No	2020	0.89 0.10-1.49	mg/l	4[26]	n/a	Water additive used to control microbes.	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

26 Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level disinfectant added for a water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.

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Disinfection Byproducts (See Table 17 of Part 5 (Information Collection Rule (IRC) Contaminant Reporting Requirements)[27]							
Contaminants Listed in Table 16 of Part 5							
Methyl Tertiary Butyl Ether (MTBE)	No	7/20	<0.093	ug/l	10	n/a	Releases from gasoline storage tanks. MTBE is an octane enhancer in unleaded gasoline. Atmospheric deposition.
Additional Contaminants Listed in Table 17 of Part 5 (Information Collection Rule (IRC) Contaminant Reporting Requirements)							
Other Principal Organic Contaminants							
Aldrin	No	6/20	<0.037	ug/l	5[25]	n/a	Pesticide used in agriculture for soil and seed treatment; used in treatment of wood and mothproofing of woolen products; byproduct of the pesticide Aldrin. In the United States, most uses were banned in 1987; however, it is still found in our environment from past uses.
Bromobenzene	No	7/20	<0.091	ug/l	5[25]	n/a	Used in organic synthesis; used in solvents; motor oil additive.
Bromochloromethane (Chlorobromomethane)	No	7/20	<0.30	ug/l	5[25]	n/a	Bromochloromethane, which finds use in fire extinguishers, may be released to the environment as a fugitive emission during its manufacture and during the use of fire extinguishers that contain the compound.
Bromomethane (Methyl Bromide)	No	7/20	<0.20	ug/l	5[25]	n/a	Used to kill a variety of pests; used to make other chemicals or as a solvent to get oil out of nuts, seeds, and wool.
n-Butylbenzene (1-Butylpropane) (Butylbenzene)	No	7/20	<0.17	ug/l	5[25]	n/a	Solvent used in organic synthesis.
Sec-Butylbenzene (2-Phenylbutane)	No	7/20	<0.14	ug/l	5[25]	n/a	Solvent used in organic synthesis.
Tert-Butylbenzene (2-methyl-2-phenylpropane)	No	7/20	<0.14	ug/l	5[25]	n/a	Solvent used in organic synthesis.
Chloroethane (Ethyl Chloride)	No	7/20	<0.22	ug/l	5[25]	n/a	Sources of chloroethane include process and fugitive emissions from its production and use as a chemical intermediate, evaporation from solvent, aerosol, and antiseptic application, stack emissions from plastics and refuse combustion, inadvertent formation during chlorination treatment, leaching from landfills and formation via microbial degradation of other chlorinated solvents.
Chloromethane (Methyl Chloride)	No	7/20	<0.15	ug/l	5[25]	n/a	Used in organic chemistry; used as an extractant for greases, oils, and resins; as a solvent in the rubber industry; as a refrigerant, blowing agent and propellant in polystyrene foam production; as an anesthetic; as an intermediate in drug manufacturing; as a food additive, a fumigant and a fire extinguisher.
2-Chlorotoluene (o-Chlorotoluene)	No	7/20	<0.11	ug/l	5[25]	n/a	Solvent and intermediate for dyes; may be released to the environment in emissions and effluent from sites of its manufacture and industrial use, from venting during storage and transport, and from disposal of spent solvents.
4-Chlorotoluene	No	7/20	<0.13	ug/l	5[25]	n/a	Solvent and intermediate for organic chemicals and dyes; may be released to the environment in emissions and effluent.
Dibromomethane (Methylene Bromide)	No	7/20	<0.16	ug/l	5[25]	n/a	Dibromomethane finds limited use in chemical synthesis, as a solvent and as a gage fluid. It may be released to the environment during these used as well as in its production and transport. Also used as a solvent for fats, waxes and resins and an ingredient of fire extinguisher fluids.
1,3-Dichlorobenzene (m-dichlorobenzene)	No	7/20	0.13	ug/l	5[25]	n/a	Used as a fumigant and insecticide.

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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water
Trans-1,4-Dichloro-2-Butene (trans-1,2-Dichloroethylene) (trans-1,2-Dichloroethene)	No	7/20	<0.090	ug/l	5[25]	n/a	Solvent for fats, phenols, camphor; retards fermentation; rubber manufacturing; refrigerants; constituent of perfumes; additive to dye and lacquer solutions.
Dichlorodifluoromethane (Difluorodichloromethane) (Freon 12)	No	7/20	<0.34	ug/l	5[25]	n/a	Refrigerant; aerosol propellant; foaming agent.
1,1-Dichloroethane	No	7/20	<0.078	ug/l	5[25]	n/a	Released into the environment as fugitive emissions and in wastewater during production and use as a chemical intermediate solvent; used in vinyl chloride manufacturing; chlorinated solvent intermediate; coupling agent in anti-knock gasoline; degreasing agent.
Dichlorofluoromethane (Dichloromonofluoromethane)	No	7/20	<0.34	ug/l	5[25]	n/a	Used as a refrigerant.
1,3-Dichloropropane	No	7/20	<0.10	ug/l	5[25]	n/a	There is no evidence of commercial production or sales of 1,3-dichloropropane in the United States in the isolated compounds or commercial mixtures. It is probably only used in small amounts possibly in laboratory synthesis.
2,2-Dichloropropane	No	7/20	<0.20	ug/l	5[25]	n/a	If detected contact the NYS Department of Health, Bureau of Water Supply Protection for specific source information.
1,1-Dichloropropene	No	7/20	<0.095	ug/l	5[25]	n/a	If detected contact the NYS Department of Health, Bureau of Water Supply Protection for specific source information.
Cis-1,3-Dichloropropene (cis-1,3-Dichloropropylene)	No	7/20	<0.081	ug/l	5[25]	n/a	Released to the air and wastewater during its production and use as a soil fumigant and chemical intermediate.
Trans-1,3-Dichloropropene (trans-1,3-Dichloropropylene)	No	7/20	0.12	ug/l	5[25]	n/a	Released to the air and wastewater during its production and use as a soil fumigant and chemical intermediate.
Dieldrin	No	6/20	<0.043	ug/l	5[25]	n/a	Pesticide used in agriculture for soil and seed treatment; used in treatment of wood and mothproofing of woolen products; byproduct of the pesticide aldrin. In the United States, most uses were banned in 1987; however, it is still found in our environment from past uses.
Hexachlorobutadiene	No	7/20	<0.26	ug/l	5[25]	n/a	Used to make rubber compounds; used as a solvent, and to make lubricants; used as a heat transfer liquid and a hydraulic fluid.
Isopropylbenzene (Cumene)	No	7/20	<0.15	ug/l	5[25]	n/a	Thinner for paints and enamels; constituent of some petro-based solvents; component of high-octane aviation fuel; used in the production of styrene, thinner, acetone and lacquer.
Methylene Chloride (Dichloromethane)	No	7/20	<0.20	ug/l	5[25]	n/a	Used as a solvent in paint strippers, as a propellant in aerosols, as a process solvent in the manufacturing of drugs, as a metal cleaning and finishing solvent.

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n-propylbenzene	No	7/20	<0.17	ug/l	5[25]	n/a	Occurs naturally in petroleum and bituminous coal. It is also released into the atmosphere in emissions from combustible sources such as incineration, gasoline engines and diesel engines. Solvent evaporation, landfill leaching, and general use of asphalt also releases this compound to the environment.	
1,1,1,2-Tetrachloroethane	No	7/20	<0.24	ug/l	5[25]	n/a	It does not appear that this compound is presently produced in the United States or is used commercially. It may, however, be formed incidentally during the manufacture of other chlorinated ethanes and released into the environment as air or wastewater emissions.	
1,1,2,2-Tetrachloroethane	No	7/20	<0.13	ug/l	5[25]	n/a	Used in the past to product other chemicals and as a solvent, to clean and degrease metals, and in paints in pesticides. Commercial production for these uses has stopped in U.S. It presently is used only in chemical production.	

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1,2,3-Trichlorobenzene	No	7/20	<0.14	ug/l	5[25]	n/a	Release will occur through its manufacture and use as an industrial chemical, chemical intermediate, dielectric fluid, heat transfer medium and chemical solvent.	
Trichlorofluoromethane (Freon 11) (Fluorotrichloromethane)	No	7/20	<0.23	ug/l	5[25]	n/a	This compound was primarily released to the environment during its use as a propellant in aerosol sprays. However, this use was banned in the United States in 1978. Other sources of emissions include its use as a solvent, chemical intermediate, blowing agent for polyurethane foams, dry cleaning agent, aerosol propellant and in fire extinguishing agent.	

Unspecified Organic Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water	
Alachlor OA	No	6/20	<0.032	ug/l	50[22]	n/a	Herbicide.	
Butachlor	No	6/20	<0.031	ug/l	50[22]	n/a	May be released to the environment during application as a selective herbicide to control annual grasses	
Carbaryl	No	6/20	<0.25	ug/l	50[22]	n/a	May be released to the environment during application as crop insecticide.	
Dicamba	No	6/20	< 0.1	ug/l	50[22]	n/a	Release to the environment by its application as a herbicide used for the control of broad leaf weeds.	

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1,4-Dioxane	No	11/20	<0.07	ug/l	50[22]	n/a	This compound may enter the environment through its use as a solvent and in textile processing, printing processes, and detergent preparations.	
thomyl	No	6/20	<0.50	ug/l	50[22]	n/a	Used as a broad spectrum insecticide. It is also used as an acaricide to control ticks and spiders. It is used for foliar treatment of vegetable, fruit and field crops, cotton, commercial ornamentals, and in and around poultry houses and dairies.	
Metolachlor	No	6/20	<0.019	ug/l	50[22]	n/a	Used in pesticide products and may be released into the environment during the application of these pesticides.	
Metribuzin	No	6/20	<0.021	ug/l	50[22]	n/a	Used in pesticide products and may be released into the environment during the application of these pesticides.	
Propachlor	No	6/20	<0.024	ug/l	50[22]	n/a	Used in pesticide products and may be released into the environment during the application of these pesticides.	
Propylene Glycol	No	6/20	<880	ug/l	1000	n/a	Used in antifreeze and deicing solvents; used to make polyester compounds; solvent in paint and plastics industry.	

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Unregulated Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language
Manganese	No	3/2018	2.3	ug/l	300	N/A	Naturally occurring; Indicative of landfill contamination.	Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products. Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.
Manganese	No	6/2018	0.65	ug/l	300	N/A		
Manganese	No	9/2018	0.56	ug/l	300	N/A		
Bromide	No	3/2018	20.9	ug/l				
Bromide	No	6/2018	64.1	ug/l				
Bromide	No	12/2018	30.7	ug/l				
HAA5	No	2018	23.20 9.04-43.79	ug/l				
HAA6BR	No	2018	10.27 5.78-14.89	ug/l				
HAA9	No	2018	32.18 14.08-56.69	ug/l				
Total Organic Carbon	No	3/2018	2320	ug/l		N/A	Naturally present in the environment.	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Total Organic Carbon	No	6/2018	2530	ug/l		N/A		
Total Organic Carbon	No	9/2018	2440	ug/l		N/A		
Total Organic Carbon	No	12/2018	2700	ug/l		N/A		

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Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

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

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

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

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 water system.

Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

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If present, 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. City of North Tonawanda 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.

Table 1 provides a list of contaminants which may be detected at your water system. This table lists each of the contaminants you are required to test for under Part 5, as well as additional contaminants that may be detected in your drinking water. It should be noted that you might not have tested for many of the contaminants listed on this table. Conversely, you may detect contaminants in your drinking water system that are not listed on this table. If you detect, a contaminant that is not listed in Table 1, please contact the State Health Department at (518) 402-7650 to obtain contaminant specific information.

Table 1

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2020, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2018, as part of our routine sampling, nine raw water samples from the East Niagara River were collected and analyzed for Cryptosporidium oocysts. This completed LT2 sampling requirements. Of these samples, none were found to contain Cryptosporidium oocysts 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. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome 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.

INFORMATION ON GIARDIA

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. During 2018, as part of our routine sampling, nine raw water samples from the East Niagara River were collected and analyzed for Giardia cysts. This completed LT2 sampling requirements. Of these samples, none indicated the presence of Giardia cysts 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. 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 settings where hand washing practices are poor.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people 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 from their health care provider about their drinking water. EPA/CDC guidelines on 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).

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Table 1

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. During 2020 monitoring showed that fluoride levels in your water were within 0.1 mg/l of the target level for 98% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2020, site preparations were completed for delivery of the back-up power generator and related equipment. An outdated underground fuel tank was removed and replaced with a new above ground tank. Work continues to complete the installation of this system. Our CIP Phase 1A is now at 30% of design completion. 1,100 feet of 12” water main was replaced in the oldest portion of our city. Unidirectional flushing continued throughout our distribution system. The raw water intake was flushed to prevent buildup of sediment. Work on our low service pumping system is expected to commence in 2022.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

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