

Acronyms and Definitions

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

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.

Recommended Upper Limit (RUL): The level of a secondary contaminant in drinking water below which there is no known or expected adverse effect of the taste, color, odor, or appearance of such water, or which may adversely affect the public welfare.

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.

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

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

Variances and Exceptions: State or EPA permission not to meet a MCL or a treatment technique under certain conditions.

ppm: Concentration in parts per million or milligrams per liter (mg/L); this is equivalent to \$0.01 of \$10,000.

ppb: Concentration in parts per billion or micrograms per liter (µg/L); this is equivalent to \$0.01 of \$10,000,000.

pCi/L: Picocuries per liter; a measure of radioactivity.

NLE: No Level Established

NTU: Nephelometric turbidity units (units describing how cloudy a water sample appears).

MFL: million fibers per liter.

<: When seen in the table, it usually refers to below detectable levels.

≤: Less than or equal to; when seen in the table, it usually refers to below or equal to detectable levels.

Contaminant: Anything found in water (including microorganisms, minerals, chemicals, radionuclides, etc.) that may be harmful to human health.

Raw Water: Water in its natural state prior to any treatment for drinking.

Source Water: Water in its natural state originating from the water- shed that supplies a water system with its raw water.

Watershed: The land area from which water drains into a stream, river, or reservoir.

Treated Water: Water to be used by a public water system that has received the application of approved water treatment chemicals.

Drinking Water: Water that has been treated to comply with EPA regulations and is pumped to the water customer for use.

Turbidity: Turbidity is a measure of the cloudiness of the water, which is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

FOOTNOTES

1. TWW averages 141 samples per month. The requirement is 120 samples monthly. An MCL violation would be triggered if, > 5% of the samples had TC detected or any detection of E-coli.
2. Beginning in 2017, Trenton Water Works was required to sample 100 sites every six months as are all large systems in the state.
3. Stage 2 DBPR monitoring is conducted quarterly. The results are shown are from the 2020 quarterly sampling.
4. The highest Locational Running Annual Average (LRAA) for TTHM and HAA5 is reported per regulation. All LRAAs which exceed the MCL shall be included. The LRAA is the average of the current and three previous quarterly results for each sample site location. The table below shows the quarterly exceedances and the LRAA for those quarters:

Site ID	Date	TTHM's (ppb)	LRAA (ppb)
ART4	8/6/2020	84.0	49.9
TTHM-1	8/6/2020	93.0	65.7
TTHM-2	8/6/2020	90.2	69.5
ST2ADD	8/6/2020	85.9	71.0
ST2ADD	11/5/2020	95.9	74.5
ART1	11/5/2020	81.0	60.4

Drinking Water Quality Results															
<i>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 care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.</i>															
BACTERIA ¹															
	2020 Positive Bacteria Results		MCL	MCLG	Violation (Y/N)	Potential Source									
Total Coliform (TC)	4 positive samples out of 1,693 (0.24%)		Presence of coliform bacteria > 5% of monthly samples.	0	N	Naturally present in the environment; their presence indicates potential contamination									
E. Coli (EC)	0		A routine sample and repeat sample if total coliform positive MCL = 0	0	N	Animal or Human Fecal Waste									
METALS															
Lead and Copper Rule ²	Units	2020 Samples Exceeding Action Level	90% of samples were less than or equal to in 2020	AL (90% Action Limit)	MCLG	Violation (Y/N)	Potential Source								
Lead (1st Draw)	ppb	5 out of 106	7.9	15	0	N	Corrosion of household plumbing								
		3 out of 106	10.1			N									
Copper (1st Draw)	ppm	0 out of 108	0.0558	1.3	0	N	Corrosion of household plumbing								
		0 out of 108	0.0853			N									
DISINFECTANT BYPRODUCTS (DBP) – STAGE 2 ³															
Sampling Sites (8 Sites)	Units	2020 Highest LRAA ⁴	2020 Range of Values ⁵	MCL (LRAA)	MCLG	Violation (Y/N)	Potential Source								
Haloacetic Acids (HAA5)															
HAA5's	ppb	33.2 (TTHM-5)	1.5 – 46.9	60	NLE	N	Disinfectant Byproducts								
Total Trihalomethanes (TTHM)Haloacetic Acids (HAA5)															
TTHM's	ppb	74.5 (ST2ADD)	1.0 – 95.9	80	NLE	N	Disinfectant Byproducts								
CLARITY CHARACTERISTICS – TESTED AT WATER TREATMENT PLANT ⁶															
	Units	2020 Highest Reported Level	2020 Range of Values	2020 Average Value	MCL	MCLG	Violation (Y/N)	Potential Source							
Turbidity	NTU	0.94	0.02 -0.94	0.06	TT = 1 NTU	0	Y	Soil runoff, river sediment							
				99.9%	95% of monthly samples must be at or below 0.3 NTU										
FREE CHLORINE RESIDUAL ⁷															
	Units	2020 Annual Average	2020 Range of Values	2020 Highest Monthly Average Result	MRDL	MRDLG	Violation (Y/N)	Potential Source							
Chlorine Residual	ppm	0.44	0.05-1.05	0.44	4	4	N	Chemicals added to control microbes							
RADIOACTIVE CONTAMINANTS IN TAP WATER ⁸															
	Units	2014 Highest Result	2014 Range of Values	MCL	MCLG	Violation (Y/N)	Potential Source								
Alpha Emitters	pCi/L	2.0	N/A	15	0	N	Erosion of natural deposits								
Combined Radium	pCi/L	0.05	N/A	5	0	N	Erosion of natural deposits								
INORGANIC COMPOUNDS ⁹															
	Units	2020 Constituent Level	MCL	MCLG	Violation (Y/N)	Potential Source									
Arsenic ¹⁰	ppm	< 0.001	5	0	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes									
Asbestos ¹¹	MFL	< 0.09	7	7	N	Decay of asbestos cement water mains; erosion of natural deposits									
Barium	ppm	0.019	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits									
Chromium	ppb	3	100	100	N	Discharge from steel and pulp mills; erosion of natural deposits									
Nickel	ppm	0.0017	NLE	NLE	N	Erosion of natural deposits; found in the earth's crust									
Nitrate (as Nitrogen)	ppm	1.0	10	10	N	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits									
UCMR4 SUBSTANCES: Unregulated Compounds ¹²															
	Units	MCL	MCLG	Average Level Detected		Range of Values	Potential Source								
Anatoxin A	µg/L	NLE	NLE	<0.030		<0.030	Cyanobacteria, often referred to as "blue-green algae," are photosynthesizing bacteria								
Cylindrospermopsin	µg/L	NLE	NLE	<0.090		<0.090									
Total Microcystins	µg/L	NLE	NLE	<0.0032		<0.0032									
SOURCE WATER PATHOGEN MONITORING ¹³															
Contaminant	TWW Source Waters		Typical Source												
Cryptosporidium, Oocysts/L	0 – 0.18		Microbial pathogens found in surface waters throughout the United States												
Giardia, Cysts/L	0 – 0.67														
ORTHOPHOSPHATE															
	Units	MCL	MCLG	Average Level Detected	Range of Values		Potential Source								
Orthophosphate	mg/L	NLE	NLE	0.33	<0.1 – 0.70		Corrosion control chemical								
SECONDARY CONTAMINANTS ¹⁴															
	Units	2020 Constituent Level	RUL	Violation (Y/N)	Potential Source										
Chloride ¹⁰	ppm	52.1	250	N	Naturally present in the environment and road salt										
Fluoride	ppm	0.18	2	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge for fertilizer and aluminum factories.										
Hardness ¹⁰	ppm	107	250	N	Naturally occurring										
Iron ¹⁵	ppm	0.94	0.3	N	Corrosion of pipes										
Manganese	ppm	0.014	0.05	N	Staining of laundry										
Sodium ¹⁰	ppm	20	50	N	Naturally occurring										
Sulfate ¹⁰	ppm	14.4	250	N	Naturally occurring										
Zinc	ppm														