



## 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 151 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 2021 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:

Haloacetic Acids (HAA5)			
Site ID	Date	Total Value (ppb)	LRAA (ppb)
HAA5-4	11/12/2021	62.5	40.6
Total Trihalomethanes (TTHM)			
Site ID	Date	Total Value (ppb)	LRAA (ppb)
ART1	8/5/2021	95.6	68.9
HAA5-4	8/6/2021	94.6	62.4
ST2ADD	8/6/2021	106.8	81.5
TTHM-1	8/5/2021	86.1	63.4
TTHM-2	8/5/2021	100	70.4
TTHM-3	8/5/2021	86.5	53.2

5. Data presented is derived from quarterly sample site results.

6. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. 99.9% of the turbidity readings in 2021 were below the treatment requirement of 0.3 NTU.

7. Chlorine residuals are taken during Coliform (bacteria) sampling in the distribution system.

8. Radioactive Contaminants (radionuclide) sampling is required once every 9-year monitoring period. The current compliance period is 2020-2028. Only detected results are reported. The results presented were sampled in 2014.

9. Inorganic compounds were tested in December of 2021.

10. NJDEP standards (SMCL).

11. Asbestos is sampled every nine years. The result presented was sampled on June 26, 2013.

12. Unregulated Contaminant Rule sampling assesses the potential risks associated with certain contaminants. The EPA will use this to determine if regulation is warranted.

13. 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.

14. Secondary contaminants are non-enforceable guidelines regulating contaminants that may cause cosmetic effects or aesthetic effects in drinking water.

15. The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

16. The results presented were sampled in 2020.

Trenton Water Works also has access to purchased groundwater as emergency water source from an adjacent water system. For further source water information, contact NJDEP Drinking Water Watch.

## Drinking Water Quality Results

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.

### BACTERIA<sup>1</sup>

	2021 Positive Bacteria Results	TT	MCLG	Violation (Y/N)	Potential Source
Total Coliform (TC)	2 positive samples out of 1,808 (0.11%)	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 TT = 0	0	N	Animal or Human Fecal Waste

### METALS

Lead and Copper Rule <sup>2</sup>		Units	2021 Samples Exceeding Action Level	90% of samples were less than or equal to in 2021	AL (90% Action Limit)	MCLG	Violation (Y/N)	Potential Source
Lead (1st Draw)	Jan-Jun	ppb	3 out of 113	5	15	0	N	Corrosion of household plumbing
	Jul-Dec		4 out of 113	5.57			N	
Copper (1st Draw)	Jan-Jun	ppm	2 out of 100	0.0552	1.3	0	N	Corrosion of household plumbing
	Jul-Dec		0 out of 100	0.06328			N	

### DISINFECTANT BYPRODUCTS (DBP) – STAGE 2<sup>3</sup>

Sampling Sites (8 Sites)	Units	2021 Highest LRAA <sup>4</sup>	2021 Range of Values <sup>5</sup>	MCL (LRAA)	MCLG	Violation (Y/N)	Potential Source
Haloacetic Acids (HAA5)							
HAA5's	ppb	40.6 (HAA5-4)	6 – 62.5	60	NLE	N	Disinfectant Byproducts
Total Trihalomethanes (TTHM)							
TTHM's	ppb	81.5 (ST2ADD)	23.5 – 106.8	80	NLE	Y	Disinfectant Byproducts

### CLARITY CHARACTERISTICS – TESTED AT WATER TREATMENT PLANT<sup>6</sup>

	Units	2021 Highest Reported Level	2021 Range of Values	2021 Average Value	MCL	MCLG	Violation (Y/N)	Potential Source
Turbidity	NTU	1.095	0.013 - 1.095	0.051	TT = 1 NTU	0	Y	Soil runoff; river sediment

### FREE CHLORINE RESIDUAL<sup>7</sup>

	Units	2021 Annual Average	2021 Range of Values	2021 Highest Monthly Average Result	MRDL	MRDLG	Violation (Y/N)	Potential Source
Chlorine Residual	ppm	0.82	0.05-2.06	1.05	4	4	N	Chemicals added to control microbes

### RADIOACTIVE CONTAMINANTS IN TAP WATER<sup>8</sup>

	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<sup>9</sup>

	Units	2021 Constituent Level	MCL	MCLG	Violation (Y/N)	Potential Source	
Ars							