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

Variances and Exemptions: 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 watershed 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 150 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 2024 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.
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. 99.96% of the turbidity readings in 2024 were below the treatment requirement of 0.3 NTU.
7. Chlorine residuals are taken during Coliform (bacteria) sampling in the distribution system.
8. Inorganic compounds were tested in March of 2024.
9. *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.
10. Secondary contaminants are non-enforceable guidelines regulating contaminants that may cause cosmetic effects or aesthetic effects in drinking water.
11. NJDEP standards (RUL).
12. Trenton Water Works Lead Service Line (LSL) Inventory is available publicly and available online at www.twwleadprogram.com.
13. Trenton Water Works received a Synthetic Organic Compound (SOC) waiver from the NJDEP for the 2023-2025 compliance period.

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 ¹										
		2024 Positive Bacteria Results		MCL		MCLG	Violation (Y/N)	Potential Source		
Total Coliform (TC)		7 positive samples out of 1,769 (0.40%)		Presence of coliform bacteria 5% of monthly samples.		0	N	Naturally present in the environment; their presence indicates potential contamination		
METALS										
Lead and Copper Rule ²		Units	2024 Range of Values	2024 Samples Exceeding Action Level		90% of samples were less than or equal to in 2024	AL (90% Action Limit)	MCLG	Violation (Y/N)	Potential Source
Lead (1st Draw)	Jan-Jun	ppb	0.66 – 11,600	10 out of 105		3.5	15	0	N	Corrosion of household plumbing
	Jul-Dec		0.66 – 62		10 out of 105				5.2	
Copper (1st Draw)	Jan-Jun	ppm	0.016 – 0.45	11 out of 105		0.08	1.3	0	N	Corrosion of household plumbing
	Jul-Dec		0.016 – 0.36		8 out of 106				0.12	
DISINFECTANT BYPRODUCTS (DBP) – STAGE 2 ³										
Sampling Sites (8 Sites)		Units	2024 Highest LRAA ⁴	2024 Range of Values ⁵		MCL (LRAA)	MCLG	Violation (Y/N)		Potential Source
Haloacetic Acids (HAA5)										
HAA5's		ppb	44 (TTHM-2)	8.3 – 78.3		60	N/A	N		Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)										
TTHM's		ppb	81 (ST2ADD)	16.7 – 142		80	N/A	Y		Byproduct of drinking water disinfection
CLARITY CHARACTERISTICS – TESTED AT WATER TREATMENT PLANT ⁶										
	Units	2024 Highest Reported Level	2024 Range of Values	2024 Average Value		MCL	MCLG	Violation (Y/N)	Potential Source	
Turbidity	NTU	0.575	0.024 -0.575	0.081		TT = 1 NTU	N/A	N	Soil runoff; river sediment	
				99.96%		95% of monthly samples must be at or below 0.3				
FREE CHLORINE RESIDUAL ⁷										
	Units	2024 Annual Average	2024 Range of Values	2024 Highest Monthly Average Result		MRDL	MRDLG	Violation (Y/N)	Potential Source	
Chlorine Residual	ppm	1.52	0.05 - 2.20	1.6		4	4	N	Chemicals added to control microbes	
INORGANIC COMPOUNDS ⁸										
	Units	2024 Constituent Level	MCL	MCLG	Violation (Y/N)	Potential Source				
Barium	ppm	0.021	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Chromium	ppb	1.7	100	100	N	Discharge from steel and pulp mills; erosion of natural deposits				
Fluoride	ppm	0.42	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge for fertilizer and aluminum factories.				
Nickel	ppm	0.0026	NLE	NLE	N	Erosion of natural deposits; found in the earth's crust				
Nitrate (as Nitrogen)	ppm	0.69	10	10	N	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits				
SOURCE WATER PATHOGEN MONITORING ⁹										
Contaminant			TWW Source Waters		Typical Source					
Cryptosporidium, Oocysts/L			0 – 0.28		Microbial pathogens found in surface waters throughout the United States					
Giardia, Cysts/L			0 – 0.28							
ORTHOPHOSPHATE										
		Units	MCL	MCLG	Average Level Detected	Range of Values		Potential Source		
Orthophosphate		ppm	NLE	NLE	0.58	0.026 – 100		Corrosion control chemical		
TOTAL ORGANIC CARBON										
		Units	MCL	MCLG	Highest Level Detected	Range of Values		Potential Source		
Total Organic Carbon		ppm	TT	NA	7.8	0.68– 7.8		Naturally Present in the environment		

SECONDARY CONTAMINANTS ¹⁰					
	Units	2024 Constituent Level	RUL	Exceedance (Y/N)	Potential Source
Chloride ¹¹	ppm	49.7	250	N	Naturally present in the environment and road salt
Hardness ¹¹	ppm	80.1	250	N	Naturally occurring
Sodium ¹¹	ppm	15.3	50	N	Naturally occurring
Sulfate ¹¹	ppm	7.0	250	N	Naturally occurring
Zinc ¹¹	ppm	0.0035	5.0	N	Naturally present in soils and ground & surface waters

Other Notes:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Trenton Water Works 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 2 to 3 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 or at www.epa.gov/safewater/lead.

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.

