

TWW entered into an Administrative Consent Order (ACO) dated Feb. 2018 with the New Jersey Department of Environmental Protection to cover the finished water reservoir. Under the ACO, the construction of the cover is scheduled to be completed by July 31, 2023. The ACO also addresses additional requirements for TWW's system operation, emergency response plan and system staffing.

TWW entered into a second Administrative Consent Order dated July 26, 2018 on the New Jersey Safe Drinking Water regulations, specifically N.J.A.C. 7:10-5.1, 5.2(a)(9), incorporated by reference, the Lead and Copper Rule 40 CFR 141.80 et. seq.

Corrective Actions for Disinfection Byproduct Levels

TWW implemented several corrective actions to bring down DBP levels. The corrective actions included: a study assessing moving the permanganate application point before superpulsators (still collecting data to study effect prior to commencement), upgrading of chlorine contact tanks, replacing filter media on 12 filters in 2019 and another 12 in 2020, and more frequent flushing of the distribution system. TWW's DBPs have been within regulatory limits since February 2019.

COVID-19 and Drinking Water

TWW continues to provide safe drinking water to the communities it serves. The COVID-19 Pandemic has not affected TWW's ability to continue to provide safe drinking water to its customers. COVID-19.

The coronavirus (COVID-19) pandemic is impacting communities throughout the world. We are working around the clock to ensure that safe, reliable water service continues to flow.

Capital Improvements

TWW is investing in our infrastructure to improve system reliability, water quality and operational performance. We have developed a six-year capital plan to meet our overall objectives.

Projects currently underway include the raw water intake improvement project, superpulsator upgrade, Pennington reservoir replacement project, meter replacement program, water treatment plant facility upgrade, and the gravity thickener rehabilitation.

For More Information:

The City of Trenton values our customers and works hard to ensure their satisfaction. For more information, we welcome you to attend a City Council meeting, held twice a month on Tues/Thurs at 5:30 PM, located at 319 East State Street, 2nd Fl, Trenton NJ.

For more specific dates, please visit the City Council Meetings, Agendas & Minutes tab on our website, www.trentonnj.org.

If you have questions or comments about this report, please contact (609) 989-3055 between 8:30 AM and 4:00 PM, or contact the following for more information.

New Jersey Department of Environmental Protection

Bureau of Safe Drinking Water. 609-292-5550 or www.state.nj.us/dep/watersupply/

Or Drinking Water Watch at: <https://www.state.nj.us/DEP/WaterWatch/public/index.jsp>

United States Environmental Protection Agency

1-800-426-4791 or www.epa.gov/safewater.

Este inform contiene informacion muy importante sobre su aqua beber.

The Water Source Used by Trenton Water Works

Trenton Water Works is a public community water system serving approximately 217,000 customers. This system's source water is drawn from Delaware River through an intake north of the Calhoun St. Bridge. The water is treated at the TWW Filtration plant on Route 29 S, and piped to the distribution system.

Trenton Water Works also has arrangements to purchase ground water from an adjacent system as needed.

Susceptibility Ratings for Trenton Water Works Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells (0) and intakes (1) that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The eight contaminant categories are defined below. NJDEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category.

For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Source Water Assessment for Trenton Water Works

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 0																								
GUDI - 0																								
Surface water intakes - 1	1			1			1			1			1			1			1			1		

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in

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Trenton Water Works
P.O. Box 528
Trenton, NJ 08604-0528

Notice to Landlords
You are required by law to make this report available to all water consumers. Please post in a visible location or distribute to all tenants. Additional copies are available by calling 609-989-3208

The City of Trenton is pleased to present the

TRENTON WATER WORKS

2020 WATER QUALITY REPORT

Quality drinking water is an essential resource. The good news is your tap water is top quality. Our water meets all federal and state standards.



Your drinking water:

It's high quality.
It's reliable.

And we are continuing to make the necessary investments to keep it that way.



Reed Gusciora, Mayor
City of Trenton
Trenton Water Works

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.

Important Information about Your Drinking Water

Trenton Water Works Violation-Description of noncompliance

2019-4101 3/6/19 Failed to remediate LRAA MCL within one year for TTHM issued 3/19/19.

2019-4103 Turbidity 1. Failure to conduct continuous monitoring 2. Failure to record IFE results every 15 minutes (since they kept the bed on and it wasn't recording properly) 3. Failure to take the daily grab sample on 5/4/19 to verify analyzers as indicated below

2019-4102 system failed to conduct grab samples after a continuous monitoring IFE failure at filter #3E and 7W. Continuous monitoring equipment failed on 05/04/2019 @ 12:40 AM and was noticed on 05/04/2019 at 6:00 PM;

2020-4106 Failure to replace 14 percent of all lead service lines by July 31, 2020.

What should you do?

There is nothing you need to do at this time. You do not need to boil your water or take other corrective actions at his time. If a situation arises where the water is no longer safe to drink, you will be notified within twenty-four hours.

Potential adverse health effects from the violations:

Lead: Infants and Children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Turbidity: Turbidity is a measure of the cloudiness in water and an indicator of water quality. Turbidity determines how effective the disinfection is in the water.

TTHM: 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 system, and may have increased risk of getting cancer.

What is being done?

Trenton Water Works Lead Service Replacement and Corrosion Control Treatment Program

Trenton Water Works has developed a program to reduce the exposure to lead for their customers in the drinking water as a response to an exceedance of the Lead Action Level in the Lead and Copper Rule in the first half of 2017. TWW has authorized \$24,000,000 in contract work to replace approximately 3800 lead service lines in the service area by 2020 with assistance from State funding. A second phase of work valued at \$25,000,000 is currently in progress to replace another 3400 lead services. Even when a lead service line is replaced, home plumbing materials installed prior to mid-1980 may still contain lead.

In parallel with the lead service line replacement program, TWW is upgrading treatment to reduce lead in drinking water. Phase 1 went on-line in December 2019. Phase 2 is anticipated to be in place by the end of 2020. TWW met water quality regulations for lead throughout the course of 2019. TWW continues to improve your drinking water every day based on State and Federal regulations. (continued)

Acronyms and 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 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.

Secondary Maximum Contaminant Level (SMCL): Any contaminant in drinking water which may adversely affect 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.

Variations 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.

AL: Action Level for Lead or Copper

DBPR: Disinfectant Byproduct Rule

NJDEP: New Jersey Department of Environmental Protection

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.

TT: Treatment Technique violation.

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 155 samples per month. The requirement is 120 samples monthly. An MCL violation would be triggered if > 5% of the samples had Total Coliform 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. The data presented is from the samples taken from the two monitoring periods running from January 1 to June 30, 2019 and July 1 to December 31, 2019.
 3. Stage 2 DBP monitoring is conducted quarterly. The results shown are from the 2019 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 | TTHMs (ppb) | LRAA (ppb) |
|---------|---------|-------------|------------|
| ST2ADD | 11/6/19 | 81.8 ug/L | 58.3 |
| TTHM-2 | 11/6/19 | 80.5 ug/L | 55.3 |
| TTHM-3 | 8/8/19 | 81.2 ug/L | 54.2 |
5. Data presented is derived from 2019 quarterly sample site results.
 6. Turbidity is a measure of the cloudiness of the water. 99.9% of the turbidity readings in 2019 were below the treatment technique requirement of 0.3 NTU. Only 1025 samples of 1,044,900 (0.1%), were greater than or equal to 0.3 NTU.
 7. Chlorine residual analysis are taken during Coliform (bacteria) sampling in the distribution system.
 8. Radioactive Contaminants (radionuclide) sampling is required every 9 years. The current compliance period is 2011-2019. Only detected results are reported.
 9. Inorganic compounds were tested in August of 2019 from the water leaving the Treatment plant.
 10. NJDEP standards. (SMCL)
 11. Unregulated Contaminant Rule sampling assesses the potential risks associated with certain contaminants. The EPA will use this to determine if regulation is warranted for specific unregulated contaminants.
 12. 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. 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.



Drinking Water Quality Results

BACTERIA ¹					
	2019 Positive Bacteria Results	MCL	MCLG	Violation (Y/N)	Potential Source
Total Coliform (TC)	7 positive samples out of 1,866 (0.4%)	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	MONITORING PERIOD	Units	2019 Samples Exceeding Action Level	90% of samples were less than or equal to in 2019	MCL	MCLG	Violation (Y/N)	Potential Source
1st Draw Lead	Jan- June 2019	ppb	8 of 101	13	AL=15	0	N	Corrosion of Household Plumbing
	Jul - Dec 2019		10 of 100	15			N	
1st Draw Copper	Jan- June 2019	ppm	0 of 101	0.06	AL=1.3	0	N	Corrosion of Household Plumbing
	Jul - Dec 2019		0 of 100	0.12			N	

DISINFECTION BYPRODUCTS (DBP) – STAGE 2 ³							
Sampling Sites (9 Sites)	Units	2019 Highest LRAA ⁴	2019 Range of Values ⁵	MCL (Annual Average)	MCLG	Violation (Y/N)	Potential Source
Total Trihalomethanes (TTHM)							
TTHM's	ppb	79.05 (TTHM-2)	16.10 - 81.80	80	NLE	N	Disinfection Byproducts
Haloacetic Acids (HAA5)							
HAA5's	ppb	45.81 (TTHM-1)	9.8 - 35.10	60	NLE	N	Disinfection Byproducts

CLARITY CHARACTERISTICS – TESTED AT WATER TREATMENT PLANT ⁶								
	Units	MCL	MCLG	2019 Highest Reported Level	2019 Range of Values	2019 Average Value	Violation (Y/N)	Potential Source
Turbidity	NTU	TT = 1 NTU	0	1.3 NTU	0.0-1.3 NTU	0.08 NTU	N	Soil runoff; river sediment
		95% of monthly samples must be at or below 0.3 NTU				99.9%		

FREE CHLORINE RESIDUAL ⁷								
	Units	2019 Chlorine Range	MRDL	MRDLG	2019 Annual Average	2019 Highest Monthly Average Result	Violation (Y/N)	Potential Source
Chlorine Residual	ppm	0.00 - 1.50	4	4	0.50	0.70	N	Chemical 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	2019 Constituent Level	MCL	MCLG	Violation (Y/N)	Potential Source
Arsenic	ppb	<1	10	0	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Asbestos	MFL	<0.09	7	7	N	Decay of asbestos cement water mains; erosion of natural deposits
Barium	ppm	0.02	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride ¹⁰	ppm	48	250 (SMCL)	NLE	N	Naturally present in the environment and road salt.
Chromium	ppb	0.74	100	100	N	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	0.71	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge for fertilizer and aluminum factories.
Hardness ¹⁰	ppm	110	250	NLE	N	Naturally Occurring
Nickel	ppb	2.5	100	100	N	Erosion of natural deposits; found in the earth's crust
Nitrate (as Nitrogen)	ppm	1.3	10	10	N	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Zinc	ppb	1.6	5000	NLE	N	Naturally Occurring/ Plumbing Fixtures
Sodium ¹⁰	ppm	17	50	NLE	N	Naturally Occurring
Sulfate ¹⁰	ppm	14	250	NLE	N	Naturally Occurring

UCMR4 SUBSTANCES: Unregulated Compounds ¹¹						
	Units	MCL	MCLG	Average Level Detected	Range of Values	Potential Source
Anatoxin A	ug/L	NLE	NLE	<0.030	<0.030	Cyanobacteria, often referred to as "blue-green algae," are photosynthesizing bacteria
Cylindrospermopsin	ug/L	NLE	NLE	<0.090	<0.090	
Total Microcystins	ug/L	NLE	NLE	<0.030	<0.030	

Source Water Pathogen Monitoring ¹²		
Contaminant	TWW Source Waters	Typical Source
Cryptosporidium, Oocysts/L	0.0 – 0.18	Microbial pathogens found in surface waters throughout the United States
Giardia, Cysts/L	0.0 – 0.67	

ORTHOPHOSPHATE						
	Units	MCL	MCLG	Average Level Detected	Range of Values	Potential Source
Orthophosphate	mg/L	NLE	NLE	0.07	<0.1 - 0.24	Corrosion control chemical

Other Notes:

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.

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 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 or at www.epa.gov/safewater/lead.