



# 2021 Annual **WATER QUALITY REPORT**

**City of Camden**

PWS ID: NJ0408001

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).



**AMERICAN WATER**

**Contract Services**

**WE KEEP LIFE FLOWING™**

# What is a Consumer Confidence Report (CCR)



**Each year, the City of Camden Division of Utilities, operated by American Water Contract Services, produces a Water Quality Report. For more information about this report, please contact the Division of Utilities (operated by American Water Contract Services) at 856-635-1496.**

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). CCRs let consumers know what contaminants, if any, were detected in their drinking water as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

## **ATTENTION: Landlords and Apartment Owners**

**Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.**

## **TABLE OF CONTENTS**

What is a Consumer Confidence Report About Your Drinking Water Supply	2
What are the Sources of Contaminants?	3
Protecting Your Drinking Water Supply	4
About Lead	5-6
Important Information About Your Water	7
• Nitrates	
• UCMR	
• PFOA/PFAS	
Water Quality Results	8
Definitions of Terms Used in Document	9
Water Quality Results: Detailed Charts	10
Tested for, But Not Detected	11-18
Contact Us	19
	20

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

The City of Camden Division of Utilities owns a public community water system consisting of eighteen (18) wells that draw raw water from the Lower Potomac-Raritan-Magothy (PRM) Aquifer. The Division of Utilities also has three (3) emergency interconnections;

- New Jersey American Water Company
- Gloucester City Water Department
- Merchantville-Pennsauken Water Commission

The New Jersey American Water Company interconnect was utilized in 2021 due to the need of additional water supply throughout the year while additional City of Camden Division of Utilities wells were taken out of service due to elevated PFC levels. Learn more about local waterways at <https://mywaterway.epa.gov/>.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate certain monitoring requirements. The City of Camden's Division of Utilities has received monitoring waivers from the regulatory agencies for:

- Asbestos
- Synthetic Organic Compounds



## QUICK FACTS ABOUT THE CITY OF CAMDEN'S WATER SYSTEM

### Communities served:

All City residents west of the Cooper River. Excluding only East Camden and Cramer Hill residents.

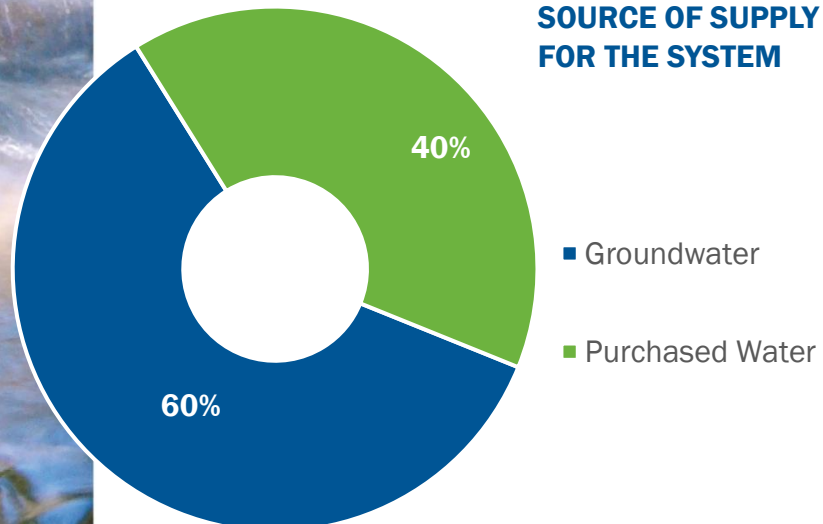
### Water source:

Fifteen (15) groundwater wells at the Morris-Delair Water Treatment Plant and two (2) groundwater wells at the Parkside Water Treatment Plant.

**Average amount of water supplied to customers on a daily basis:** 6.65 million gallons per day

### Disinfection treatment:

Groundwater supplies are disinfected with chlorine to maintain water quality in the distribution system.





# What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. 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 activity.

## SPECIAL HEALTH INFORMATION

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/Centers for Disease Control and Prevention (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 (800-426-4791).

### CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

<b>Microbial Contaminants</b>	such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
<b>Inorganic Contaminants</b>	such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
<b>Pesticides and Herbicides</b>	which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
<b>Organic Chemical Contaminants</b>	including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
<b>Radioactive Contaminants</b>	which can be naturally occurring or be the result of oil and gas production and mining activities.

# Protecting Your Water Sources

## WHAT IS S.W.A.P.

The Source Water Assessment Program (SWAP) is a program of the New Jersey Department of Environmental Protection (NJDEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility.

## SUSCEPTIBILITY RATINGS FOR NEW JERSEY AMERICAN WATER

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 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. Source Water Assessment Reports and Summaries available at <http://www.nj.gov/dep/watersupply/swap/index.html>, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov).

## CONTAMINANT CATEGORIES

The NJDEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of the SWAP, 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 a low rating was assigned.

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, the NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Source water protection is a long-term dedication to clean and safe drinking water. It is more cost effective to prevent contamination than to address contamination after the fact. Every member of the community plays an important role in source water protection. The NJDEP recommends controlling activities and development around drinking water sources, whether it is through land acquisition, conservation easements or hazardous waste collection programs. We will continue to keep you informed of SWAP's progress and developments.

## SUSCEPTIBILITY CHART DEFINITIONS

- **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 the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call (800) 648-0394.
- **Disinfection By-product Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors			
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
Morris N. Well Field (3)		3		2	1					3	2		1	3			3			2	1		3		
Morris S. Well Field (10)		7	3		9	1				10	3		7	8	2			10			10			10	
Delair Well Field (2)		2			2					2	2			2				2			2			2	
Parkside Well Field (2)			2		2					2	2			2			2				2	2			



# Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

## WHAT CAN YOU DO?

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact waterways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag. Check with the local refuse facility for proper disposal.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

**Report any spills, illegal dumping or suspicious activity to [insert regulatory agency] here:** Insert link and or phone number.

## FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at [www.amwater.com/camden](http://www.amwater.com/camden), or contact the Director of Public Works, the Division of Utilities directly or attend a Camden City Council meeting on the second Tuesday of each month. You can also contact the regional Source Water Protection Lead, NJDEP's Bureau of Safe Drinking Water at: 609-292-5550 or [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov)

## WHAT ARE WE DOING?

Our priority is to provide reliable, quality drinking water service for customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply. We have developed a Source Water Protection Plan under the Pennsylvania Source Water Protection Technical Assistance Program (SWPTAP). This is a voluntary program to identify and address potential threats to drinking water supplies. Stakeholder involvement is an important part of the program. We partner with DEP to host annual meetings to review progress on the plan with stakeholders. We also welcome input on the plan or local water supplies through our online feedback form.

**Here are a few of the efforts underway to protect our shared water resources:**



**Community Involvement:** We have a proactive public outreach program to help spread the word and get people involved. This includes school education, contests, and other community activities.



**Environmental Grant Program:** Each year, we fund projects that improve water resources in our local communities.



**Pharmaceutical Collection:** We sponsor drop box locations across the Commonwealth for residents to safely dispose of unwanted drugs for free. This helps keep pharmaceutical products from entering water supplies.

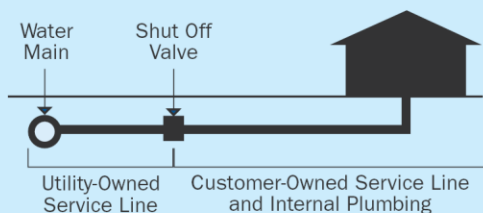


**Protect Our Watersheds Art Contest:** Open to fourth, fifth and sixth graders, the contest encourages students to use their artistic skills to express the importance of protecting our water resources.

# About Lead

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. Your water utility 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 <http://www.epa.gov/safewater/lead>.

## UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation. Variations may apply.

## The most common source of lead in tap water is from the customer's plumbing and their service line.

The water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

### MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

### CHECK YOUR PLUMBING AND SERVICE LINE

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If your service line is made of lead, and you're planning to replace it, be sure to contact us at 1-855-769-3164.



**1. Flush your taps.** The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



**2. Use cold water for drinking and cooking.** Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



**3. Routinely remove and clean all faucet aerators.**



**4. Look for the "Lead Free" label** when replacing or installing plumbing fixtures.



**5. Follow manufacturer's instructions for replacing water filters** in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



**6. Flush after plumbing changes.** Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.

# Important Information About Drinking Water



## UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The EPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the EPA. Unregulated contaminants are those for which the EPA has not established drinking water standards. UCMR2 testing was conducted between November 2008 and August 2009, and UCMR3 assessment monitoring was conducted between January 2013 and December 2016. The fourth list of contaminants to monitor as part of the UCMR was published by the EPA in December 2016. UCMR4 testing began in 2018 and was completed in 2020. The results from the UCMR monitoring are reported directly to the EPA. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact the City of Camden Division of Utilities (operated by American Water Contract Services) at 856-635-1496.

## PFAS MONITORING

PFAS refers to per- and polyfluoroalkyl substances, a class of synthetic chemicals, manufactured for industrial applications and commercial household products such as: non-stick cookware; waterproof and stain resistant fabrics and carpets; firefighting foam and cleaning products. The properties that make these chemicals useful in so many of our every-day products also resist breaking down and therefore persist in the environment. Exposure may be from food, food packaging, consumer products, house dust, indoor and outdoor air, drinking water and at workplaces where PFAS are made or used.

The City of Camden Division of Utilities operated by American Water Contract Services is currently performing a combination of regulated sampling required by the NJDEP as well as voluntary sampling. The three (3) regulated contaminants in the PFAS group are currently being monitored for include PFNA with an MCL set at 13 nanograms per liter or parts per trillion (ppt), PFOA with an MCL of 14 ppt and PFOS with an MCL of 13 ppt.

The science and regulation of PFAS and other contaminants is always evolving, and the City of Camden's Division of Utilities operated by American Water Contract Services strives to be a leader in research and development. PFAS contamination is one of the most rapidly changing areas in the drinking water field. We have invested in our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critically important to addressing this issue.

## NITRATES

Nitrate in drinking water at levels above 10 ppm 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 advice from your health care provider





## Water Quality Results

### **WATER QUALITY STATEMENT**

We are pleased to report that during calendar year 2021, the results of testing of your drinking water complied with all state and federal drinking water requirements.

For your information, we have compiled a list in the table below showing the testing of your drinking water during 2021. The New Jersey Department of Environmental Protection (NJDEP) allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, are more than one year old.

# Definition of Terms

These are terms that may appear in your report.

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

**Level 1 Assessment:** A Level 1 assessment is a study 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 a very detailed study 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.

**LRAA:** Locational Running Annual Average

**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. See also Secondary Maximum Contaminant Level (SMCL).

**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 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 contaminants.

**MFL:** Million fibers per liter.

**micromhos per centimeter ( $\mu\text{mhos/cm}$ ):** A measure of electrical conductance.

**NA:** Not applicable

**ND:** Not detected

**Nephelometric Turbidity Units (NTU):** Measurement of the clarity, or turbidity, of the water.

**pH:** A measurement of acidity, 7.0 being neutral.

**picocuries per liter (pCi/L):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

**parts per billion (ppb):** One part substance per billion parts water, or micrograms per liter.

**parts per million (ppm):** One part substance per million parts water, or milligrams per liter.

**parts per trillion (ppt):** One part substance per trillion parts water, or nanograms per liter.

**Secondary Maximum Contaminant Level (SMCL):** Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**TON:** Threshold Odor Number

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

**%:** Percent

## MEASUREMENTS

### Parts Per Million



in a 10 gallon fish tank

### Parts Per Billion



in a 10,000 gallon swimming pool

### Parts Per Trillion



in 35 junior size Olympic pools

# Water Quality Results

The City of Camden's Division of Utilities operated by American Water Contract Services conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2021, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the "Definition of Terms" on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

**NOTE: Regulated contaminants not listed in this table were not found in the treated water supply.**

## LEAD AND COPPER MONITORING PROGRAM - At least 30 tap water samples collected at customers' taps every three years

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb)	2021	Yes	0	15	3.2	30	0	Corrosion of household plumbing systems.
Copper (ppm)	2021	Yes	1.3	1.3	.041	30	0	Corrosion of household plumbing systems.

## REVISED TOTAL COLIFORM RULE - At least 50 samples collected each month in the distribution system

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Percentage	Typical Source
Total Coliform <sup>1</sup>	2021	Yes	0	*TT = Less than 5%	1.8%	Naturally present in the environment.
E. Coli <sup>2</sup>	2021	Yes	0	TT = No confirmed samples	0	Human and animal fecal waste.

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples / highest number of positive samples in any month.

<sup>1</sup> The Treatment Technique for Total Coliforms requires that if the maximum percentage OR number of total coliform positive samples are exceeded, a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or Level 2 Assessments are required depending on the circumstances.

<sup>2</sup> The Treatment Technique for E. Coli requires that for any routine sample that is positive for total coliform where either the original sample or one of the repeat check samples is also positive for E. Coli, a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed.

<sup>3</sup> The E. Coli MCL is exceeded if routine and repeat samples are total coliform-positive and either is E. coli-positive, or the system fails to take repeat samples following an E. coli-positive routine sample, or the system fails to analyze total coliform-positive repeat samples for E. coli.

### DISINFECTION BYPRODUCTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2021	Yes	NA	80	41	1.3 to 65.3	By-product of drinking water disinfection.
Haloacetic Acids (HAA5s) (ppb)	2021	Yes	NA	60	18.9	15.1 to 25.4	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages.

### DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Minimum Chlorine Residual	Compliance Result	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm) <sup>1</sup>	2021	Yes	4	4	TT ≥ 0.20	.30	.30 to 3.8	Water additive used to control microbes.
Distribution System Chlorine Residual (ppm) <sup>2</sup>	2021	Yes	4	4	TT ≥ 0.20	1.41	.64 to 2.8	Water additive used to control microbes.

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.

2 - Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.

### REGULATED SUBSTANCES - Volatile Organic Compounds - Collected at the Treatment Plants

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Methyl Tertiary Butyl Ether (ppb)	2021	Yes	70	70	0.16	ND to 0.16	Leaking underground gasoline and fuel oil tanks, gasoline and fuel oil spills.
CIS-1,2 Dichloroethylene (ppb)	2021	Yes	70	70	0.1	ND to 0.1	Discharge from Industrial Chemical Factories
Trichloroethylene (TCE) (ppb)	2021	Yes	1	1	0.17	ND to 0.17	Discharge from metal degreasing sites and other factories

**Radiological Contaminants - Collected at the Treatment Plant**

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Alpha Emitters (pCi/L)	2017	Yes	0	15	3.55	ND to 3.55	Erosion of natural deposits.
Combined Radium (pCi/L)	2017	Yes	0	5	1.58	ND to 1.58	Erosion of natural deposits.

**OTHER REGULATED SUBSTANCES - Collected at the Treatment Plant**

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/SMCL	Highest Compliance Result	Range Detected	Typical Source
Barium (ppm)	2020	Yes	2	2	.052	.013 to .052	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (ppm)	2021	Yes	10	10	1.5	0.52 to 1.5	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Arsenic (ppm)	2020	Yes	0	10	.0024	.0018 to .0024	Erosion from naturally occurring deposits; runoff from orchards; runoff from glass and electronics production wastes
Chromium (ppm)	2020	Yes	1	1	0.20	0.19 to 0.20	Discharge from metal degreasing sites and other factories
Mercury (ppm)	2020	Yes	2	2	0.16	0.10 to 0.16	A solvent that discharges from Industrial sites
Total Thallium (ppm)	2020	Yes	2	2	.00017	.000091 to .00017	Leeching from ore-processing sites; Discharge from electronics, glass and drug factories.

**OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant**

Substance (with units)	Year Sampled	Average or Range Detected	Comments
pH	2021	7.25 to 9.02	pH is a measure of the acid/base properties of water.

## UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST - Water Leaving the Treatment Facility)					
Parameter	Units	Year Sampled	Average Result	Range Detected	Typical Source
Bromochloroacetic Acid	ppb	2018	3.9	2.6 to 5.8	By-product of drinking water disinfection
Bromodichloroacetic acid	ppb	2018	3.6	1.8 to 5.0	By-product of drinking water disinfection
Chlorodibromoacetic acid	ppb	2018	1.6	.90 to 2.5	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	2018	2.75	1.9 to 4.2	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	2018	4.9	4.0 to 6.3	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	2018	.32	ND to .68	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	2018	10.1	7.5 to 14	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	2018	12.1	9.3 to 16	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	2018	19.1	15 to 25	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	2018	2.1	1.6 to 3.1	By-product of drinking water disinfection
2-Methoxyethanol	ppb	2018	ND	ND	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis.
Manganese*	ppb	2018	.73	ND o 1.6	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

\* Manganese has a Secondary MCL of 50 ppb.

Secondary Contaminants - Collected in the Distribution System							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	SMCL	Highest Compliance Result	Range Detected	Typical Source
Manganese <sup>1</sup> (ppm)	2021	Yes	N/A	0.05	0.0042	0.0033 to 0.0042	Erosion of natural deposits.

1 - Substances with Secondary MCLs do not have MCLGs; these limits are primarily established to address aesthetic concerns.

## PFAS MONITORING

PFAS refers to per- and polyfluoroalkyl substances, a class of synthetic chemicals, manufactured for industrial applications and commercial household products such as: non-stick cookware; waterproof and stain resistant fabrics and carpets; firefighting foam and cleaning products. The properties that make these chemicals useful in so many of our everyday products also resist breaking down and therefore persist in the environment. Exposure may be from food, food packaging, consumer products, house dust, indoor and outdoor air, drinking water and at workplaces where PFAS are made or used.

The City of Camden Division of Utilities operated by American Water Contract Services is currently performing a combination of regulated sampling required by the NJDEP as well as voluntary sampling. The three (3) regulated contaminants in the PFAS group are currently being monitored for include PFNA with an MCL set at 13 nanograms per liter or parts per trillion(ppt), PFOA with an MCL of 14 ppt and PFOS with an MCL of 13 ppt.

The science and regulation of PFAS and other contaminants is always evolving, and the City of Camden’s Division of Utilities operated by American Water Contract Services strives to be a leader in research and development. PFAS contamination is one of the most rapidly changing areas in the drinking water field. We have invested in our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critically important to addressing this issue.

This is one of the most rapidly changing landscapes in drinking water contamination. We have invested time and effort on our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence, fate and transport in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critical for addressing this issue.

**Lauren A. Weinrich, Ph.D.**  
Principal Scientist,  
Water Research and Development

### REGULATED PERFLUORINATED COMPOUNDS

Substance (with Units)	Year Sampled	Compliance Achieved	MCL	Average Result	Range Detected	Typical Source
Perfluorononanoic Acid (PFNA) (ppt)	2021	Yes	13	2.6	ND to 4.8	Used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives and photographic films
Perfluorooctanoic Acid (PFOA) (ppt)	2021	Yes	14	8.9	6.1 to 11.9	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance
Perfluorooctanesulfonic Acid (PFOS) (ppt)	2021	Yes	13	7.6	6.0 to 10.7	

**UNREGULATED PERFLUORINATED COMPOUNDS (cont'd)**

Substance	Units	Average Result	Range Detected	Typical Source
Perfluorohexanoic Acid (PFHxA)	ppt	5.1	3.9 to 6.1	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.
Perfluorohexane sulfonic Acid (PFHxS)	ppt	4.5	ND to 7.6	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.
Perfluoroheptanoic Acid (PFHpA)	ppt	3.2	2.3 to 4.1	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.
Perflurobutane sulfonic Acid (PFBS)	ppt	0.8	ND to 2.2	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.
2-(N-Ethyl-perfluorooctane sulfonamido) Acetic Acid (NEtFOSSA)	ppt	1.6	ND to 3.9	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films.



## DRRWTP NJ0327001 - PRIMARY REGULATED SUBSTANCES

### DISINFECTANTS - Collected at the Surface Water Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Minimum Chlorine Residual	Compliance Result	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm) <sup>1</sup>	2021	Yes	4	4	TT $\geq$ 0.20	0.48	0.48 to 1.14	Water additive used to control microbes.

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.

### TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Range of % Removal Required	Lowest % Removal	Range of % and Ratio Removal Achieved	Number of Quarters Out of Compliance	Typical Source
Total Organic Carbon (TOC)	2021	Yes	N/A	TT $\geq$ 35% Removal	35% to 45%	43%	43% to 69%	0	Naturally present in the environment.
Actual/Required TOC Removal (Ratio)	2021	Yes	N/A	TT: Running Annual Average $\geq$ 1.0			1.22 to 1.97	0	Naturally present in the environment

### TURBIDITY – Continuous Monitoring at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement and Lowest Monthly % of Samples $\leq$ 0.3 NTU	Sample Date of Highest and Lowest Compliance Result	Typical Source
Turbidity (NTU) <sub>3</sub>	2021	Yes	0	TT: Running Annual Average $>$ 1.0	0.1	10/29/2021	Soil runoff.
	2021	Yes	N/A	TT: At least 95% of samples $\leq$ 0.3 NTU	100%	N/A	Soil runoff

3 - 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

DRRWTP NJ0327001

OTHER REGULATED SUBSTANCES - Collected at the Surface Water Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/SMCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm)	2021	Yes	10	10	1.01	1.01	Runoff from fertilizer use, industrial or domestic wastewater discharges; erosion of natural deposits
Perfluorooctanoic Acid (PFOA)	2021	Yes	0	14	4.9	2.3 to 4.9	Used in Teflons, fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives, photo films
Perfluorooctanesulfonic Acid (PFOS)	2021	Yes	0	13	5.1	ND to 5.1	Manmade chemical; used in products for stain, grease, heat and water resistance

UNREGULATED CONTAMINANTS MONITORING (UCMR 4) 2019							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	SMCL	Range of % Removal Required	Lowest % Removal	Typical Source
Manganese <sub>3</sub> (ppb)	2019	Yes	N/A	50	1.02	ND to 1.8	Naturally present in the environment.

3 - Manganese is regulated as a secondary contaminant with a secondary maximum contaminant level of 50 ppb



## Tested for, but Not Detected

- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethene
- 1,1-Dichloroethane
- 1,2,4-Trichlorobenzene
- 1,2-Dichlorobenzene
- 1,2-Dichloropropane
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 1,1-Dichloropropene
- 1,3-Dichloropropane
- 2,2-Dichloropropane
- 2-Chlorotoluene
- 4-Chlorotoluene
- Trans-1,3-Dichloropropene
- Cis-1,3-Dichloropropene
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- 1,2,3-Trichlorobenzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 1,2,3-Trichloropropane
- Benzene
- Bromobenzene
- Bromochloromethane
- Bromodichloromethane
- Bromoform
- Bromomethane
- Sec-Butylbenzene
- Tert-Butylbenzene
- N-Butylbenzene
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromomethane
- Dichlorodifluoromethane
- Ethyl Benzene
- Methylene chloride
- Hexachlorobutadiene
- Isopropylbenzene
- P-Isopropyltoluene
- Naphthalene
- N-Propylbenzene
- Styrene
- Tetrachloroethene (PCE)
- Trichlorofluoromethane
- Tetrachloroethene (PCE)
- Toluene
- trans-1,2-Dichloroethene
- Vinyl chloride
- Xylene (total)
- Fluoride
- Chromium
- Copper
- Nickel
- Antimony
- Beryllium
- Cadmium
- Lead
- Selenium
- Mercury
- Cyanide, Total
- Chloride
- Aluminum
- Copper
- Silver
- Zinc
- Nitrite
- Perfluorododecanoic Acid (PFDoA)
- Perfluorotetradecanoic Acid (PFTA)
- Perfluorotridecanoic Acid (PFTrDA)
- Perfluorodecanoic Acid (PFDA)
- N-methyl-per-fluoro-octane-sulfanamidoacetic acid (NMeFOSAA)

# How to Contact Us

If you have any questions about this report, your drinking water, or service, please contact the City of Camden's Division of Utilities (operated by American Water Contract Services), Monday to Friday, 8 a.m. to 4 p.m. at: 856-635-1496



## WATER INFORMATION SOURCES

**American Water Contract Services:**

[www.amwater.com/camden](http://www.amwater.com/camden)

**City of Camden:**

[www.ci.Camden.nj.us/water-services/](http://www.ci.Camden.nj.us/water-services/)

**United States Environmental Protection Agency (USEPA):**

[www.epa.gov/safewater](http://www.epa.gov/safewater)

**New Jersey Department of Environmental Protection**

**Bureau of Safe Drinking Water:** (609) 292-5550

[www.state.nj.us/dep](http://www.state.nj.us/dep)

**Centers for Disease Control and Prevention:** [www.cdc.gov](http://www.cdc.gov)

**American Water Works Association:** [www.awwa.org](http://www.awwa.org)

**Water Quality Association:** [www.wqa.org](http://www.wqa.org)

**National Library of Medicine/National Institute of Health:**

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

**This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-856-635-1496.**

Este informe contiene información importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda al 1-856-635-1496.