



2022 Annual **WATER QUALITY REPORT**

LIBERTY WATER COMPANY

PWS ID: NJ2004001

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.).

QUALITY. ONE MORE WAY WE KEEP LIFE FLOWING.



**NEW JERSEY
AMERICAN WATER**

WE KEEP LIFE FLOWING®

What is a Consumer Confidence Report (CCR)



Each year, Liberty Water Company, operated by American Water Contract Services, produces a Water Quality Report. For more information about this report, please contact Liberty Water Company at 1-855-722-7066.

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 | 2 |
| Mark of Excellence | 3 |
| About Your Drinking Water Supply | 4 |
| What are the Sources of Contaminants? | 5 |
| Protecting Your Drinking Water Supply | 6 |
| Conservation Tips – Every Drop Counts | 7 |
| About Lead | 8 |
| Determining your Service Line Material | 9 |
| Important Information About Your Water | 10-12 |
| • Chloramines | |
| • Fluoride | |
| • Radon | |
| • Cryptosporidium | |
| • Nitrates | |
| • UCMR | |
| • PFAs | |
| Water Quality Results | 13 |
| Definitions of Terms Used in Document | 14 |
| Water Quality Results: Detailed Charts | 15-21 |
| Contact Us | 22 |



Mark of
Excellence



EVERY STEP OF THE WAY.

Our team monitors and tests your water at multiple points throughout our process of drawing it from its source, treating it to meet drinking water standards, and distributing it through our pipeline systems. **In fact, American Water performs over one million tests annually for about 100 regulated contaminants, nationwide.**



EXPERTISE. RECOGNIZED AT THE HIGHEST LEVEL.

American Water is an expert in water quality testing, compliance and treatment and has established industry-leading water testing facilities. Our dedicated team of scientists and researchers are committed to finding solutions for water quality challenges and implementing new technologies. American Water is recognized as an industry leader in water quality and works cooperatively with the EPA so that drinking water standards and new regulations produce benefits for customers and public water suppliers. American Water has earned awards from the EPA's Partnership for Safe Water as well as awards for superior water quality from state regulators, industry organizations, individual communities, and government and environmental agencies.



WATER QUALITY. DOWN TO A SCIENCE.

Our team also has access to American Water's Central Laboratory in Belleville, Illinois, which conducts sophisticated drinking water testing and analysis. American Water scientists refine testing procedures, innovate new methods, and set new standards for detecting potentially new contaminants—even before regulations are in place.



MAINTAINING QUALITY FOR FUTURE GENERATIONS.

Just as New Jersey American Water are investing in research and testing, we also understand the importance of investing in the infrastructure that provides high-quality water service to you.



About Your Drinking Water Supply

WHERE YOUR WATER COMES FROM

Water for the Liberty System is purchased from Raritan Water System and Newark Water Dept. Source water for the Raritan System is surface water that comes from the Millstone River, Raritan River, and the Delaware & Raritan Canal. The Newark Water Company's surface water sources are from reservoirs located in the Pequannock and Wanaque watersheds.

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.

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.

For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report. Source Water Assessment Reports and Summaries are available for public water systems 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.



QUICK FACTS ABOUT THE LIBERTY SYSTEM

Water source:

Your water comes from a public community water system consisting of 98 wells, 7 surface water intakes and 1 purchased surface water source. Water is purchased from Newark Water Co.

Source water comes from Millstone River, Raritan River, Delaware & Raritan Canal.

Average amount of water supplied to customers daily:

13 million gallons per day

Disinfection treatment:

Surface water supplies are treated with chloramines 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:

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



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 water ways 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 the NJDEP at 1-877-WARNDEP (1-877-927-6337)

FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at newjerseyamwater.com or contact customer Call Center at **1-855-722-7066**.

Remember to Be Water Smart

Wise water use is an important first step in protecting our water supply. Such measures not only save the supply of our source water but can also save you money by reducing your water bill.

Wise water tips for inside your home

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can be water smart outdoors as well

- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.





Every Drop
Counts

Six Simple Steps to Save Water



Fix any leaking faucets.

One drop every 2 seconds from a leaky faucet wastes 2 gallons of water every day. That's water — and money — down the drain.



Don't let faucets run when brushing, shaving, or washing the dishes. Just turning off the water while you brush can save 200 gallons a month.



Run washing machines and dishwashers only when they are full, or select the properly-sized wash cycle for the current laundry load.



Install water-saving shower heads and faucet aerators in the bathroom and kitchen (available at most home improvement stores and some supermarkets).



Don't wash your car at home. A car wash uses much less water and often recycles it, too.

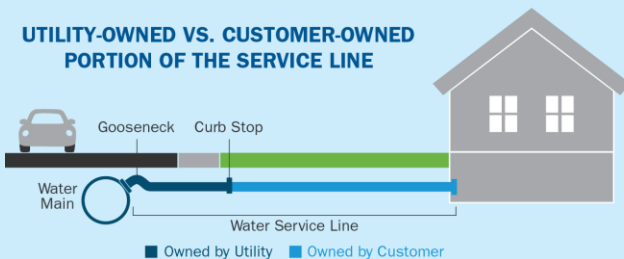


Turn off automatic lawn and garden sprinklers when it's raining outside and at the end of the growing season.

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 utility-owned 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 1-855-722-7066.



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.





Determining Your Service Line Material

Homeowners' service lines are most commonly made of lead, copper, galvanized steel or plastic. Homes built before 1930 are more likely to have lead plumbing systems.

There are different ways that you can determine if you have a lead service line.

- You can access your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve and identify the pipe material using the chart on the right.
- A licensed and insured plumber can inspect your pipes and plumbing.
- Lead test kits can be purchased at local hardware and home improvement stores. These kits are used to test paint, but can also be used to test pipe – not the water inside. Look for an EPA recognized kit. Wash your hands after inspecting plumbing and pipes.

TYPES OF PIPE

| | |
|---|---|
|  | • Galvanized: A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes. |
|  | • Copper: The color of a copper penny. |
|  | • Plastic: Usually white, rigid pipe that is jointed to water supply piping with a clamp. Note: It can be other colors, including blue and black. |
|  | • Lead: A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will <u>not</u> cling to lead pipes. |

YOUR SERVICE LINE MATERIAL

At New Jersey American Water, providing safe, reliable water service is our top priority. In July 2021, the state of New Jersey enacted legislation that requires all water providers to share with customers the material of the utility-owned and customer-owned service lines that lead to their property, notify customers with service lines that are lead or galvanized steel, and replace them.

To support this initiative, New Jersey American Water has created an interactive map to help our customers learn or identify their service line material and the next steps they can take to support this initiative. To access the inventory map, please visit newjerseyamwater.com/leadfacts and to self-identify your service line, visit newjerseyamwater.com/survey.

Please note if your service lines contain lead, it does not mean you cannot use water as you normally do. New Jersey American Water regularly tests for lead in drinking water and our water meets state and federal water quality regulations, including those set for lead.

For added protection and to comply with the new legislation, we will be removing lead and lead/galvanized piping from service lines over time. For more information on lead in drinking water, please visit newjerseyamwater.com/leadfacts.



Important Information About **Drinking Water**

CHLORAMINES

Chloramines are a New Jersey state and federally approved alternative to free chlorine for water disinfection. Chloramines can reduce disinfection by-product formation and may help reduce concerns related to taste. Chloramines are also used by many American Water systems and many other water utilities nationally.

Chloramines have the same effect as chlorine for typical water uses with the exception that chloramines must be removed from water used in kidney dialysis and fish tanks or aquariums.

Treatments to remove chloramines are different than treatments for removing chlorine. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life. You may also contact our Customer Service Center at 1-855-722-7066 for more chloramine information.

FLUORIDE

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. **By nature** when groundwater comes into contact with fluoride-containing minerals naturally present in the earth; or
2. **By a water purveyor** through addition of fluoride to the water they are providing in the distribution system.

The Liberty Water Company does not contain naturally – occurring fluoride in the purchased surface water supply. Your contracted system operator, NJ American Water does not add fluoride to the water they are providing to the city of Elizabeth.

If you have any questions on fluoride, please call the Liberty Water Company Customer Call Center at 1-855-722-7066.

RADON

Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs while showering, washing dishes and performing other household activities. Radon can move up through the ground and into a home through cracks in the foundation. Compared to radon entering the home through soil, radon entering through tap water is, in most cases, a small source of radon in indoor air. Inhalation of radon gas has been linked to lung cancer; however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. The EPA is developing regulations to reduce radon in drinking water. Radon in the air is inexpensive to test and easy to correct. For additional information, call the EPA's Radon Hotline at 1 -800 -55 -RADON





Important Information About **Drinking Water**

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. 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 and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are 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 be spread through means other than drinking water.

NITRATES

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant or are pregnant, you should ask for advice from your health care provider.

Important Information About **Drinking Water**



PFAS

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™), and waterproofing (e.g., GORE-TEX™). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.

As a leader in the industry, New Jersey American Water has been proactive in our approach to addressing PFAS, in many cases, ahead of New Jersey regulations. Additionally, in 2023, Liberty Water Co. will be checking our drinking water for 29 PFAS chemicals through our participation in the U.S. EPA Unregulated Contaminant Monitoring Rule program, or UCMR.

New Jersey American Water has successfully piloted cutting-edge treatment strategies to effectively remove PFAS from several groundwater stations within its service territory. In fact, the company's PFAS removal projects were recognized with three awards, including a Governor's Environmental Excellence Award, and Alliance for Action's Leading Infrastructure Award, and s Commerce and Industry Association of NJ 2021 Environmental Award.

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 our Customer Service Center at 1-855-722-7066.



American Water has a history of leading research to understand contaminants that can make their way through the environment. Our dedicated scientists work with leaders in the water community to develop methods to detect, sample, measure and address these contaminants. Because investment in research is critical to address PFAS, American Water actively assesses treatment technologies that can effectively remove PFAS from drinking water.

Lauren A. Weinrich, Ph.D.
Principal Scientist



Water Quality Results

WATER QUALITY STATEMENT

We are pleased to report that during calendar year 2022, 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 2022. The NJ Department of Environmental Protection 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.

OTHER INFORMATION

We hope the report will raise your understanding of drinking water issues and awareness of the need to protect your drinking water sources.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. The Liberty Water Company has received monitoring waivers for Asbestos for the 2020 – 2028 monitoring period.

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

Liberty Water Company 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 2022, 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.

HOW TO READ THIS TABLE (FROM LEFT TO RIGHT)

- Starting with **Substance (with units)**, read across.
- **Year Sampled** is usually in 2022 but may be a prior year.
- A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements.
- **MCLG/MRDLG** is the goal level for that substance (this may be lower than what is allowed).
- **MCL/MRDL/TT/Action Level** shows the highest level of substance (contaminant) allowed.
- **Highest, Lowest or Average Compliance Result** represents the measured amount detected.
- **Range** tells the highest and lowest amounts measured.
- **Typical Source** tells where the substance usually originates.

Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

Vulnerable Populations Statement

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 (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

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

PRIMARY REGULATED SUBSTANCES

| LEAD AND COPPER MONITORING PROGRAM - At least 50 tap water samples collected at customers' taps every year | | | | | | | | |
|--|--------------|---------------------|-------|-------------------|-----------------------------|----------------------|--------------------------|--|
| Substance (with units) | Year Sampled | Compliance Achieved | MCL G | Action Level (AL) | 90 th Percentile | No. of Homes Sampled | Homes Above Action Level | Typical Source |
| Lead (ppb) | 2022 | Yes | 0 | 15 | 3 | 52 | 2 | Corrosion of household plumbing systems. |
| Copper (ppm) | 2022 | Yes | 1.3 | 1.3 | 0.3 | 52 | 1 | Corrosion of household plumbing systems. |

PRIMARY REGULATED SUBSTANCES

TURBIDITY¹ - Collected at the Treatment Plant

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Single Measurement and Lowest Monthly % of Samples ≤ 0.3 NTU | Range Detected | Typical Source |
|------------------------|--------------|---------------------|------|--|---|----------------|----------------|
| Turbidity (NTU) | 2022 | Yes | 0 | TT: Single result > 1 NTU | 1 | 0.03 to 1 | Soil runoff. |
| | 2022 | Yes | NA | TT: At least 95% of samples ≤ 0.3 NTU | 98% | NA | Soil runoff. |

1. 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.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Lowest Compliance Result | Range Detected | Typical Source |
|--|--------------|---------------------|------|-------------------------------------|--------------------------|----------------|---------------------------------------|
| Total Organic Carbon (TOC) | 2022 | Yes | NA | TT: $\geq 25\%$ removal | 25% | 25% to 72% | Naturally present in the environment. |
| Ratio of Actual / Required TOC Removal | 2022 | Yes | NA | TT: Running annual average ≥ 1 | 1.3 | 1.3 to 1.7 | Naturally present in the environment. |

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

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Compliance Result | Range Detected | Typical Source |
|--|--------------|---------------------|-----------|------------------------|---------------------------|----------------|--|
| Entry Point Chloramines (ppm) ¹ | 2022 | Yes | MRDLG = 4 | TT: Results ≥ 0.2 | 0.3 ¹ | 0.3 to 4 | Water additive used to control microbes. |
| Distribution System Chloramines (ppm) ² | 2022 | Yes | MRDLG = 4 | MRDL = 4 | 1.0 ² | 0.05 to 2.1 | Water additive used to control microbes. |

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

2 - Data represents the highest annual average of chlorine residuals measured throughout our distribution system, and range indicates chloramine residual detected in the distribution system.

PRIMARY REGULATED SUBSTANCES

REVISED TOTAL COLIFORM RULE - At least 100 samples collected each month in the distribution system

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Percentage OR Highest No. of Samples | Typical Source |
|-----------------------------|--------------|---------------------|------|---|--|---------------------------------------|
| Total Coliform ¹ | 2022 | Yes | 0 | *TT = Less than 5% OR TT = No more than 5 positive monthly sample | 3% | Naturally present in the environment. |
| E. Coli ^{2,3} | 2022 | 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.

¹ 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.

² The Treatment Technique for E. Coli requires that for any total coliform positive routine sample with one or more total coliform positive check samples and an E. coli positive result for any of the samples a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed. 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.

³ E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems

DISINFECTION BYPRODUCTS - Collected at the Treatment Plant

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Compliance Result | Range Detected | Typical Source |
|------------------------|--------------|---------------------|------|-----|---------------------------|----------------|--|
| Bromate (ppb) | 2022 | Yes | NA | 10 | 2 | ND to 2 | By-product of drinking water disinfection. |

Regulated Substance – Collected at the Treatment Plants

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | Limit | Highest Result | Range Detected | Comments |
|----------------------------|--------------|---------------------|------|-------|----------------|----------------|--|
| Arsenic ¹ (ppb) | 2022 | NA | NA | 5 | 1 | ND to 1 | Erosion of natural deposits |
| Nitrate ² (ppm) | 2022 | Yes | 10 | 10 | 2 | 1 to 2 | Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits. |

1 - Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system; and may have an increased risk of getting cancer.

2 -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 for advice from your health care provider.

PRIMARY REGULATED SUBSTANCES

Regulated Substance – Collected at the Treatment Plants

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Compliance Result | Range Detected | Typical Source |
|------------------------------|--------------|---------------------|------|------|---------------------------|----------------|--|
| 1,2,3-Trichloropropane (ppb) | 2021 | Yes | 0.03 | 0.03 | 0.006 | ND to 0.006 | Halogenated alkane; used as an ingredient in paint, varnish remover, solvents and degreasing agents. |

PFAS

In 2022, U.S. EPA set health advisory levels for four PFAS chemicals – PFOA (0.004 part per trillion (ppt), PFOS (0.02 ppt), GenX (10 ppt), and PFBS (2,000 ppt). Based on current analytical methods, however, the health advisory levels for PFOA and PFOS are below the level of both detection (determining whether or not a substance is present) and quantitation (the ability to reliably determine how much of a substance is present). This means that it is possible for PFOA or PFOS to be present in drinking water at levels that exceed health advisories even if testing indicates no level of these chemicals. U.S. EPA is currently developing drinking water regulations for PFOA and PFOS that take these challenges into consideration and New Jersey American Water will take appropriate actions to meet any new regulations. Finally, PFAS chemicals are unique, so two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another. For more information on PFAS, please visit newjerseyamwater.com and select PFAS under Water Quality.

PERFLUORINATED COMPOUNDS

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | MCL | Highest Result | Range Detected | Typical Source |
|--|--------------|---------------------|------|-----|----------------|----------------|---|
| Perfluorooctanoic Acid (PFOA) (ppt) ¹ | 2022 | Yes | NA | 14 | 5 | 3 to 5 | Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam. |
| Perfluorooctanesulfonic Acid (PFOS) (ppt) ² | 2022 | Yes | NA | 13 | 4 | 2 to 4 | Discharge from industrial, chemical factories, release of aqueous film forming foam. |

1 - Some people who drink water containing PFOA in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, reproductive system. Drinking water containing PFOA in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant.

2 - Some people who drink water containing PFOS in excess of the MCL over many years could experience problems with their immune system, kidney, liver, or endocrine system. For females, drinking water containing PFOS in excess of the MCL over many years may cause developmental effects and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these developmental effects can persist through childhood.

PRIMARY REGULATED SUBSTANCES

DISINFECTION BYPRODUCTS - Stage 2: Collected in the Distribution System

| Sample Location | Year Sampled | Compliance Achieved | MCLG | MCL | Highest LRAA | Range Detected | Typical Source |
|--|--------------|---------------------|------|-----|--------------|----------------|--|
| Total Trihalomethanes (TTHM) (ppb) | | | | | | | |
| A | 2022 | Yes | NA | 80 | 36 | 13 to 33 | By-product of drinking water disinfection. |
| B | 2022 | Yes | NA | 80 | 30 | 7 to 58 | By-product of drinking water disinfection. |
| SMS-1 | 2022 | Yes | NA | 80 | 39 | 10 to 37 | By-product of drinking water disinfection. |
| SMS-2 | 2022 | Yes | NA | 80 | 32 | 6 to 54 | By-product of drinking water disinfection. |
| SMS-4 | 2022 | Yes | NA | 80 | 31 | 6 to 64 | By-product of drinking water disinfection. |
| SMS-5 | 2022 | Yes | NA | 80 | 31 | 7 to 28 | By-product of drinking water disinfection. |
| SMS-13 | 2022 | Yes | NA | 80 | 34 | 7 to 29 | By-product of drinking water disinfection. |
| SMS-16 | 2022 | Yes | NA | 80 | 37 | 7 to 62 | By-product of drinking water disinfection. |
| Total Haloacetic Acids (HAA5) (ppb) | | | | | | | |
| A | 2022 | Yes | NA | 60 | 28 | 13 to 24 | By-product of drinking water disinfection. |
| B | 2022 | Yes | NA | 60 | 21 | 7 to 39 | By-product of drinking water disinfection. |
| SMS-1 | 2022 | Yes | NA | 60 | 35 | 6 to 31 | By-product of drinking water disinfection. |
| SMS-2 | 2022 | Yes | NA | 60 | 23 | 8 to 45 | By-product of drinking water disinfection. |
| SMS-4 | 2022 | Yes | NA | 60 | 21 | 5 to 41 | By-product of drinking water disinfection. |
| SMS-5 | 2022 | Yes | NA | 60 | 14 | 8 to 18 | By-product of drinking water disinfection. |
| SMS-13 | 2022 | Yes | NA | 60 | 29 | 9 to 28 | By-product of drinking water disinfection. |
| SMS-16 | 2022 | Yes | NA | 60 | 26 | 9 to 45 | 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.

SECONDARY SUBSTANCES DETECTED- Collected at the Treatment Plant and the Distribution System¹

| Substance (with units) | Year Sampled | Compliance Achieved | MCLG | SMCL | Highest Result | Average or Range Detected | Comments |
|--|--------------|---------------------|------|------|----------------|---------------------------|-----------------------------|
| Aluminum (ppm) | 2022 | NA | NA | 0.2 | 0.02 | ND to 0.02 | Erosion of natural deposits |
| Total Hardness (as CaCO ₃) (ppm) | 2022 | NA | NA | 250 | 130 | 97 | Naturally Occurring |
| Manganese ² (ppm) | 2022 | NA | NA | 0.05 | 0.01 | ND to 0.01 | Naturally Occurring |
| Sodium ³ (ppm) | 2022 | NA | NA | 50 | 38 | 32 to 38 | Erosion of natural deposits |

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

2 - The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water

3 - For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Cryptosporidium

The U.S. EPA issued a rule in January 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment. To comply with this rule, New Jersey American Water conducted 24 consecutive months of monitoring for Cryptosporidium in our raw water sources. Monitoring was completed in 2017. We detected the organism in the raw source water during this testing. **These samples were collected from the source before the water was processed through our treatment plant.** In accordance with the requirements of EPA's Long Term 2 Enhanced Surface Water Treatment Rule, an additional treatment upgrade is in process at the Raritan- Millstone Plant for removal/inactivation of Cryptosporidium. Results from the same monitoring period for our Canal Rd Plant raw water source and Newark Water Co. indicate that no additional treatment is necessary. For additional information regarding cryptosporidiosis and how it may impact those with weakened immune systems, please contact your personal health care provider. The recent data collected is presented in the Source Water Monitoring table below.

| Source Water Monitoring | | | | |
|-------------------------|-----------|-------------------------|------------------|---|
| Substance (2015 - 2017) | Units | Raritan-Millstone Plant | Canal Road Plant | Typical Source |
| Cryptosporidium | Oocysts/L | ND - 0.9 | ND - 0.5 | Microbial pathogens found in surface waters throughout the United States. |
| Giardia | Cysts/L | ND - 0.6 | ND - 0.7 | Microbial pathogens found in surface waters throughout the United States. |

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 (Point of Entry)

| Parameter | Units | Average Result | Range Detected | Typical Source |
|--------------------------------|-------|----------------|----------------|---|
| Germanium | ppb | 0.05 | ND - 0.66 | Naturally-occurring element; commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics and solar applications |
| Manganese* | ppb | 17.1 | ND - 160 | Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element. |
| Perfluorohexanoic acid (PFHxA) | ppt | 3.0 | 2.7 - 3.2 | Manmade chemical; used in products for stain, grease, heat and water resistance |

* Manganese has a Secondary MCL of 50 ppb.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST (Distribution System)

| Parameter | Units | Average Result | Range Detected | Typical Source |
|------------------------------|-------|----------------|----------------|---|
| Bromochloroacetic Acid | ppb | 2.2 | ND - 4.4 | By-product of drinking water disinfection |
| Bromodichloroacetic acid | ppb | 2.7 | 1.0 - 5.3 | By-product of drinking water disinfection |
| Chlorodibromoacetic acid | ppb | 0.1 | ND - 1.2 | By-product of drinking water disinfection |
| Dibromoacetic Acid | ppb | 0.3 | ND - 0.7 | By-product of drinking water disinfection |
| Dichloroacetic Acid | ppb | 9.9 | 2.8 - 36 | By-product of drinking water disinfection |
| Total Haloacetic Acids | ppb | 25.1 | 6.6 - 62 | By-product of drinking water disinfection |
| Total Haloacetic Acids - Br | ppb | 5.3 | 2.3 - 9.4 | By-product of drinking water disinfection |
| Total Haloacetic Acids-UCMR4 | ppb | 29 | 8.9 - 61 | By-product of drinking water disinfection |
| Trichloroacetic Acid | ppb | 15 | 3.4 - 37 | By-product of drinking water disinfection |

How to Contact Us

If you have any questions about this report, your drinking water, or service, please contact our Customer Call Center at 1-855-722-7066.
Liberty Water Company
Served by New Jersey American Water
1 Water Street, Camden, NJ 08102
www.amwater.com/njaw



WATER INFORMATION SOURCES

New Jersey Department of Environmental Protection Bureau of Safe Drinking Water
www.nj.gov/watersupply

United States Environmental Protection Agency (USEPA):
www.epa.gov/safewater

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention: www.cdc.gov

American Water Works Association: www.awwa.org

Water Quality Association: www.wqa.org

National Library of Medicine/National Institute of Health:
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 1-855-722-7066.

આ અહેવાલ માં તમારા પીવાના પાણી વિષે
અગત્ય ની જાણકારી આપવા માં આવી છે.
અને અનુવાદ કરો અથવા જેને સમજાવી પડતી
ભાષા તેની સાથે વાત કરો

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

本报告与您的饮用水有关。
如果您不了解其内容，应请别人为您翻译解说。

이 보고서에는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다.
만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.