

City of Salem  
Water & Sewer Department  
17 New Market Street  
Salem, New Jersey 08079

**OPEN IMMEDIATELY**  
**ANNUAL DRINKING**  
**WATER REPORT**

# Annual Drinking Water Quality Report

## 2024 (2023 Data)

Salem Water Department  
PWSID# NJ1712001



*We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with safe and dependable supply of drinking water.*

*These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drink*

*ing water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.*

*This CCR provides important information about your drinking water. It shows how your drinking water measured up to government standards during 2023. Please read it carefully and feel free to call the City of Salem Water Department at 856.935.0350 or the EPA Safe Drinking Water Hotline at 800.426.4791 with any questions. If you have specific questions about water as it relates to your personal health, we suggest that you contact your health care provider.*

### Landlord Distribution

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.).

### Contact Information

If you have any questions about this report or concerning your drinking water, please call (856) 935-0350. We want our valued customers to be informed about their water. If you want to learn more, please attend any of our regularly scheduled City Council meetings at the at the Olde County Courthouse, 113 Market Street, Salem, NJ. Meetings are normally held on the second and third Monday of each month. Due to holidays and a summer schedule, please check the City website at [www.cityofsalemnj.gov](http://www.cityofsalemnj.gov) to confirm the meeting dates each month or call the City office at 856-935-0373. All meetings are held at 6:30 PM.



## How do drinking water sources become polluted?

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

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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.

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 result from urban stormwater runoff, industri-

al 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 stormwater runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 **EPA's Safe Drinking Water Hotline (800-426-4791)**.

## Where does your water come from?

We are committed to ensuring the quality of your water. Our water sources include five wells. Our wells draw groundwater from the Mount Laurel - Wenonah Aquifer at a depth of over 160 feet. Four are all located in the City of Salem and the fourth in Quinton Township. In addition, we can draw surface water from two other

sources, one located in Quinton Township and the other in Alloway Township. To comply with state and federal regulations, the City of Salem Water Department issues an annual Consumer Confidence Report describing the quality of the drinking water.

The water quality report for the City of Salem can also be found at <https://cityofsalemnj.gov/water-sewer/>

## Source Water Assessments

The NJDEP has completed and issued the Source Water Assessment Report and Summary for public water systems, which are available at <http://www.state.nj.us/dep/swap> or by contacting the NJDEP's Bureau of Safe Drinking Water at 609-292-5550.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize or change existing monitoring schedules based on the susceptibility ratings.

If you have questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at [watersupply@dep.state.nj.us](mailto:watersupply@dep.state.nj.us) or 609-292-5550.

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

**Nutrients:** Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include

nitrogen and phosphorus.

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

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

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

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

**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 Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

Source Water Assessment	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			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
Sources																								
Wells – 2			2			2			2			2			2			2			2			2
Surface Water Intakes - 2	2			2			1	1				2	2					2			2	2		



## People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, persons who have undergone organ transplants, people with HIV / AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Salem City's 2023 Water Quality Results - PWSID# NJ1712001					
Radionuclides	MCLG	MCL	Level Detected	Violation	Likely Source
Combined Radium (-226 & -228) Test Results Year 2023	0 pCi/L	5 pCi/L	Range: 1.5 - 1.5 Highest: 1.5	N	Erosion of natural deposits
Inorganic Chemicals	MCLG	MCL	Level Detected	Violation	Likely Source
Antimony Test Results Year 2012	6 ppb	6 ppb	Range: ppb Highest: ppb	N	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic Test Results Year 2022 - 2021	0 ppb	5 ppb	Range: ND - 2.23 Highest: 2.23	N	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production waste
Barium Test Results Year 2022 - 2021	2 ppm	2 ppm	Range: 0.018 - 0.037 Highest: 0.037	N	Discharge of drilling wastes, metal refineries, and erosion of natural deposits
Nickel Test Results Year 2022 - 2021	n/a	none	Range: 0.5 - 1.75 ppb Highest: 1.75 ppb	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits
Nitrate - Nitrite Test Results Year 2023	10 ppm	10 ppm	Range: ND - 0.136 Highest: 0.136	N	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
Fluoride Test Results Year 2022 - 2021	4 ppm	4 ppm	Range: 0.11 - 0.123 Highest: 0.123	N	Erosion of natural deposits
Copper & Lead	MCLG	AL	Level Detected	Violation	Likely Source
Copper Test Results Year 2021	1.3 ppm	1.3 ppm	90th Percentile: 0.258 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Lead Test Results Year 2021	0 ppb	15 ppb	90th Percentile: 0.0 Samples > AL: 0	N	Corrosion of household plumbing systems and erosion of natural deposits
Regulated Disinfectants	MRDLG	MRDL	Level Detected	Violation	Likely Source
Chlorine Test Results Year 2022	4.0 ppm	4.0 ppm	Range: 0.39 - 1.68 RAA: 0.84	N	Water additive to control microbes
Disinfection By-products	MCLG	MCL	Level Detected	Violation	Likely Source
HAA5 Haloacetic Acids Test Results Year 2023	n/a	60 ppb	Range: 2.52 - 9.2 Highest LRAA: 6.19	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes Test Results Year 2023	n/a	80 ppb	Range: 13.74 - 43.8 Highest LRAA: 30.54	N	Byproduct of drinking water disinfection
Synthetic Organic Compounds (SOC)	MCLG	MCL	Level Detected	Violation	Likely Source
Di(2-Ethylhexyl) Phthalate Test Results Year 2022	400 ppb	400 ppb	Range: 0.07 - 0.07 Highest: 0.071	N	Discharge from chemical factories
Perfluorooctanoic Acid (PFOA) Test Results Year 2023	n/a	14 pt	Range: ND - 5.6 Highest LRAA: 5.1	N	Discharge from industrial, chemical factories, release of aqueous film forming foam.
Perfluorononanoic Acid (PFNA) Test Results Year 2023	n/a	13 ppt	Range: ND - 4.5 Highest LRAA: 4.03	N	Discharge from industrial, chemical factories, release of aqueous film forming foam.

Salem City's 2023 Water Quality Results - PWSID# NJ1712001

Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed	
Level 1 Assessment - Total Coliform	0	0	0	0	

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Salem had 0 positive results for coliform bacteria in 96 samples.

Secondary Contaminants	RUL	Level Found	RUL Exceedance	Likely Source
Calcium Test Results Year 2021	n/a	Range: 60.0-60.0 Highest: 60.0	N	Erosion from natural deposits
Chloride Test Results Year 2022 - 2021	250 ppm	Range: 12.0 - 104 Highest: 104	N	Erosion from natural deposits
Hardness, Carbonate Test Results Year 2022	250 ppm	Range: 131 - 131 Highest: 131	N	Naturally present in the environment
Iron Test Results Year 2022 - 2021	0.3 ppm	Range: ND - 0.693 Highest: 0.693	Y <sup>2</sup>	Erosion of natural deposits
Manganese Test Results Year 2022 - 2021	0.05 ppm	Range: ND - 0.0243 Highest: 0.0243	N	Erosion of natural deposits
Sodium Test Results Year 2022 - 2021	50 ppm	Range: 4.15 - 38.0 Highest: 38.0	N	Naturally present in the environment
Sulfate Test Results Year 2022 - 2021	250 ppm	Range: ND - 55.4 Highest: 55.4	N	Erosion from natural deposits; Industrial wastes
Total Dissolved Solids Test Results Year 2022 - 2021	500 ppm	Range: 150 - 298 Highest: 298	N	Erosion from natural deposits; Industrial wastes
Zinc Test Results Year 2022 - 2021	5 ppm	Range: ND - 0.116 Highest: 0.116	N	Erosion from natural deposits

<sup>2</sup>The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

Note on Recommended Upper Limit Exceedances: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health.

Footnotes: The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data though representative, is more than one year old.

### Lead Notice

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. Salem City Water Department 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

However, for those served by a lead service line, flushing times may vary based on the length of the service line and plumbing configura-

tion in your home. If your home is set back further from the street a longer flushing time may be needed. To conserve water, other household water usage activities such as showering, washing clothes, and running the dishwasher are effective methods of flushing out water from a service line.

Call us at 856-935-0469 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

A copy of the Lead Service Line inventory can be found at <https://cityofsalemnj.gov/>. If the service line at your address is listed as unknown, please give us a call at **856-935-0469** to find out more information on how to identify your service line material.



## Important Information About Your Drinking Water

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health

standards. During Jan—Dec 2023, we did not monitor or test for 1,1,1-Trichloroethane, and therefore cannot be sure of the quality of your drinking water during that time. All other Volatile Organic Compounds were analyzed during this compliance period and were not detected. We have changed internal procedures to enhance coordination with our certified laboratory to avoid missed samples and get results submitted to the DEP on time in the future.

We routinely monitor for the presence of federal and state regulated drinking water contaminants. New Jersey adopted a standard, or maximum contaminant level (MCL), for PFNA in 2018 and monitoring began for City of Salem Water System in

2021. The MCL for PFNA is 13 parts per trillion (ppt) and is based on a running annual average (RAA), in which the four most recent quarters of monitoring data are averaged. Our system exceeded the PFNA MCL RAA at treatment plant TP002009 during quarter 2 and quarter 3 of 2022. The RAA for 2023 was below the MCL.

The primary source of PFNA in our system was from a single well source. This source has been taken offline and will remain offline until treatment can be installed to maintain PFNA levels below the MCL.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

### Water Conservation Tips

- Fix leaking faucets & toilets: A single dripping faucet can waste hundreds or thousands of dollars per year
- 50-70% of household water is used outdoors on average. Water lawns wisely & turn off the hose when washing the car
- Install low flow shower heads
- Turn off faucet when brushing your teeth

### Facts About Water Usage

The **water meter** is an important part of your water service. It measures the exact amount of water you use, and its readings serve as the basis for your water consumption charge.

These readings also allow us to compare total water use registered by all meters versus total water pumped from the wells. Variations in these figures could indicate underground leaks and unaccounted water usage.

Have you ever wondered how much water you use in the appliances around your home? The following list reflects the average daily water use of certain appliances and fixtures within the home:

- Washing Machine 25-50 gallons
- Bathtub 25-35 gallons
- Dishwasher 15-30 gallons
- Toilet 4-6 gallons
- Shower 3-5 gallons (per minute)
- Sink Faucet 1-3 gallons (per minute)
- Outside Faucet 3-5 gallons (per minute)

### Definitions

**ppm** **Parts Per Million:** equivalent of 1 second in 12 days

**ppb** **Parts Per Billion:** equivalent of 1 second in 32 years

**ppt** **Parts Per Trillion:** equivalent of 1 second in 32,000 years

**pCi/L** **Picocuries Per Liter:** equivalent to 1 second in 32,000 years

**ND** **Not Detected**

**n/a** **Not Applicable**

**RUL** **Recommended Upper Limit**

**RAA** **Running Annual Average**

**LRAA** **Locational Running Annual Average**

**CU** **Color Unit**

**AL** **Action Level** The concentration of a contaminant which, if exceeded, triggers treatment or

other requirements which a water system must follow.

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

**MCL** **Maximum Contaminant Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

**MCLG** **Maximum Contaminant Level Goal:** 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 disinfectant to control microbial contamination.

**MRDL** **Maximum Residual Disinfection Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG** **Maximum Residual Disinfection Level Goal:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit of the use of disinfectants to control microbial contamination.

**Secondary Standards:** Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.