Annual Drinking Water Quality Report

2022 (2021 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 a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

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 drinking 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 2021. 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.

Where does your water come from?

We are committed to ensuring the quality of your water. Our water sources include four wells. Our wells draw groundwater from the Mount Laurel - Wenonah Aquifer at a depth of over 160 feet. Three are all located in the City of Salem and the forth 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/city-departments/

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 Salem City Municipal Building located at 1 New Market Street. Meetings are held on the first and third Monday of the 2nd' 3rd 4th 10th and 12th month. Meetings are held on the third Monday of the 1st, 6th, 7th, 8th, 9th, and the 11th, of the month. All meetings are held at 7:30 PM.

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.)

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 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Call us at **(856) 935-0350** 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.

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.

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)**.

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, 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 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.

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 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 occur-ring 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.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells – 2			2			2			2			2			2			2		2			2	
GUDI – 0																								
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).

2021 Water Quality Results

Inorganic Chemicals	MCLG	MCL	Level Detected	Violation	Likely Source
Barium Test Results Year 2021	2 ppm	2 ppm	Range: 0.04-0.04 Highest: 0.04	N	Discharge of drilling wastes, metal refineries, and erosion of natural deposits
Nickel Test Results Year 2021	n/a	none	Range: 0.0005 - 0.0005 Highest: 0.0005	N	Runoff from fertilizer, leaching from septic tanks, sewage, and erosion of natural deposits
Nitrate (as Nitrogen) Test Results Year 2021	10 ppm	10 ppm	Range: ND - ND Highest: ND	N	Corrosion of household plumbing systems and erosion of natural deposits
Fluoride Test Results Year 2021	4 ppm	4 ppm	Range: 0.11 - 0.11 Highest: 0.115	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	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
Chlorine Test Results Year 2021	4.0 ppm	4.0 ppm	Range: 0.00-1.21 RAA: 0.84	N	Water additive to control microbes
Volatile Organic Compounds / Disinfection By-products	**MCLG**	**MCL**	**Level Detected**	**Violation**	**Likely Source**
HAA5 Haloaecetic Acids Test Results Year 2021	n/a	60 ppb	Range: 1.4 - 32 Highest: 19.03 LRAA	N	Byproduct of drinking water disinfection
TTHM Total Trihalomethanes[1] Test Results Year 2021	n/a	80 ppb	Range: 10.3 - 132.6 Highest: 52.95 LRAA	N	Byproduct of drinking water disinfection

[1] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Individual Contaminants	MCLG	MCL	Level Found	Violation	Likely Source
Perfluoroctanoic Acid (PFOA) Test Results Year 2021	n/a	13 pt	Range: 10.0 - 10.0 Average: 10.0	N	Discharge from industrial, chemical factories, release of aqueous film forming foam.
Perfluorononanoic Acid (PFNA) Test Results Year 2021	n/a	14 ppt	Range: 18.0 - 18.0 Average: 18.0	**Y[2]**	Discharge from industrial, chemical factories, release of aqueous film forming foam.
Ethylene Dibromide Test Results Year 2021	70 ppb	70 ppb	Range: 0.82 - 0.82 Highest: 0.82	N	Byproduct of drinking water disinfection

[2] Studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

Secondary Contaminants	RUL	Level Found	Violation	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 2021	250 ppm	Range: 43.8 - 43.8 Highest: 43.8	N	Erosion from natural deposits
Sodium Test Results Year 2021	50 ppm	Range: 35.0 - 35.0 Highest: 35.0	N	Naturally present in the environment
Sulfate Test Results Year 2021	250 ppm	Range: 55.4 - 55.4 Highest: 55.4	N	Erosion from natural deposits; Industrial wastes
Zinc Test Results Year 2021	5 ppm	Range: 0.116 - 0.116 Highest: 0.116	N	Erosion from natural deposits

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.

Microbiologicals-Revised Total Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Actions Required	Corrective Actions Completed
Level 1 Assessment - Total Coliform	84	95	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. Fieldsboro had 0 positive results for coliform bacteria in 12 samples.

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, are more than one year old.

Definitions

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

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

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

NA **Not Applicable**

RUL **Recommended Upper Limit**

ND **Not Detected**

RAA **Running Annual Average**

LRAA **Locational Running Annual Average**

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 contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MCLG **Maximum Contaminant Level Goal**: The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

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

CU **Color Unit**

pCi/L **Picocuries Per Liter**: equivalent of one second in 32 million years

MRDL **Maximum Residual Disinfection Level** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disnfectant 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.

Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.

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.

Monitoring Violations Annual Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the City of Salem

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

**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 01/01/2022 to 03/31/2022 we did not test for disinfectant byproducts in the required month of February, but instead sampled in the month of March. Therefore, we cannot be sure of the quality of your drinking water during that time. We have reevaluated our sample schedule with our certified laboratory to avoid missed samples in the future.*

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Total Trihalomethanes & Total Haloacetic Acid, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were taken
Total Trihalomethanes (TTHM)	1 sample every quarter	1	February 2022	March 2022
Total Haloacetic Acids (HAA5)	1 sample every quarter	1	February 2022	March 2022

What is being done?

This is not an emergency, if it had been you would have been contacted immediately. Total Trihalomethanes & Total Haloacetic Acid samples were taken in March 2022 and results submitted to the NJ Division of Water Supply & Geoscience.

For more information, please contact Cindy Edwards at 856-935-0469 and 856-935-0350 or 19 South Front Street, Salem NJ

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.

This notice is being sent to you by Salem Water Department. State Water System ID#: NJ1712001

Date distributed:_____.