

**PWS ID# NJ1702001**

**Borough of Elmer**

**Water Department**

**Consumer Confidence**

**Report**

**For the Year 2022,**

**Results from the Year**

**2021**



# **Borough of Elmer Water Department** **Consumer Confidence Report** **For the Year 2022, Results from the Year 2021**

We are very pleased to provide you with the 2022 Consumer Confidence Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been to provide to you a safe and dependable supply of drinking water. The Borough of Elmer advises that 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.).

Our water source is from two groundwater wells located within the Borough of Elmer. These wells draw water from the Mount Laurel - Wenonah Aquifer located approximately 500 feet deep. The Borough owns the land around these wells and restricts any activity that could pose contamination of the underground water source. Calcium Hypochlorite Chlorination is used at both well sites in order to deliver water for disinfection to our residents and businesses.

The Borough of Elmer pumped approximately 46 million gallons in 2021 representing total water consumption from both Well #6 and Well #8. Each well alternate on a daily basis supplying water throughout our water system.

An elevated storage tank is located on State Street with a capacity of 200,000 gallons. The purpose of the tank is to help equalize and improve water pressure and increase firefighting capabilities for all the fire hydrants located throughout the Elmer Water System. The elevated water storage tank allows a 24-hour supply of water in the event of a water emergency.

The water system consists of eight linear miles of water distribution mains, 90 fire hydrants and 540 service connections serving approximately 1400 people. All fire hydrants throughout the water system are flushed and inspected twice per year. We continue to upgrade and maintain all of the fire hydrants in the Elmer water distribution system.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the Borough of Elmer which is available at [www.state.nj.us/dep/swap](http://www.state.nj.us/dep/swap) or by contacting NJDEP Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Borough of Elmer Water Department at (856) 358-4010, ext. 110.

The Borough of Elmer performed more than 200 analyses for constituents in your drinking water according to Federal and State laws. 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.

**We are pleased to report that our drinking water is safe and meets Federal and State safety requirements.** This report describes our water quality and what it means. If you have any questions about this report, please contact our offices at (856) 358-4010, ext. 110 or stop at our office to inspect our test data.

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

The Borough of Elmer Water Dept. is a public community water system consisting of 2 wells, 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s) and 0 purchased surface water source(s).

### **Susceptibility Ratings for the Borough of Elmer Water Department Sources**

The table below illustrates the susceptibility ratings for the eight contaminant categories for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M) or low (L) for each contaminant category. The eight contaminant categories are defined at the bottom of this page. **If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water.** The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compound			Inorganics			Radio-nuclides			Radon			DBPs		
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

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

## **DEFINITIONS**

**In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:**

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Total Organic Carbon (TOC): We are required to remove a certain percentage of (TOC) from our drinking water on a monthly basis. Total Organic Carbon has no adverse health effects. However, TOC provides a medium for the formation of disinfection byproducts.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal -The "Goal"(MCLG) is 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Goal (MRDLG): The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Secondary Contaminant- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

## **Consumer Confidence Report Information:**

The following information is required to be placed in all Consumer Confidence Reports by the United States Environmental Protection Agency (USEPA) and the NJDEP Bureau of Safe Drinking Water. The information will include health effects of contaminants detected in the water supply.

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.

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 the 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 at 1-800-426-4791.

The Borough of Elmer routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2021.

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

<b>TEST RESULTS</b>						
<b>Contaminant</b>	<b>Violation Y/N</b>	<b>Level Detected</b>	<b>Units of Measurement</b>	<b>MC LG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>
<b>Microbiological Contaminants</b>						
Total coliform Bacteria	N	0		0	1 positive monthly sample.	Naturally present in the environment
<b>Inorganic Contaminants: 2021</b>						
Barium	N	0.0205	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Results at 90 <sup>th</sup> Percentile Sampled – 7-2021	N	0.264 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide	N	5.00	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	0.600	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Results at 90 <sup>th</sup> Percentile Sampled – 7-2021	N	1.23 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	0.0588	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

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. We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

The New Jersey Department of Environmental Protection required the Elmer Water Department to monitor for 10 additional Inorganic samples plus 26 Volatile Organic Compounds. All Compounds were tested and none were detected.

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

Radioactive Contaminants - 2021	Violation Y/N	Level Detected	Units of Measurement	MC LG	MCL	Likely Source of Contamination
Gross Alpha	N	<3.00	pCi/l	0	15	Erosion of natural deposits
Combined Radium- 228 & 226	N	1.50	pCi/l	0	5	Erosion of natural deposits
Radium- 228	N	<1.00	pCi/l	0	15	Erosion of natural deposits

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. We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

Disinfection Byproducts Stage-2 – Taken 2021							
THM Total Trihalomethanes Test results Yr. 2021	N	Range = <0.50 – 6.75 Highest detect = 6.75		ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2021	N	Range = <1.00 – 5.30 Highest Detection = 5.30		ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants	Level Detected (Average & Highest Detect)			MRDL	MRDLG		
Chlorine Test results year 2021	Range = 0.02 – 1.50 ppm Average = 0.5 ppm			4.0 ppm	4.0 ppm		

\* Chlorine – Water additive to control microbes

**Perfluorinated Compounds Monitoring:** Perfluorinated compounds are widely found in the environment. EPA has identified a guidance level of 0.070 ppb for PFOA/PFOS (combined), and NJDEP has adopted new drinking water Maximum Contaminant Level (MCL) standards for PFOA and PFOS of 14 ng/L (0.014 ppb) and 13 ng/L (0.013 ppb), respectively, as of January 2021.

Contaminant	Level Detected	Units of Measurement	Likely source
(PFOS) Perfluorooctane Sulfonate	Range = ND	ppb	Used in the manufacture of fluoropolymers.
(PFOA) Perfluorooctanoic Acid	Range = ND	ppb	Used in the manufacture of fluoropolymers.
(PFNA) Perfluorononanoic Acid	Range = ND	ppb	Used in the manufacture of fluoropolymers.

## What are PFOA and PFOS?

Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are per- and polyfluoroalkyl substances (PFAS), previously referred to as perfluorinated compounds, or PFCs, that are man-made and used in industrial and commercial applications. PFOA was used as a processing aid in the manufacture of fluoropolymers used in non-stick cookware and other products, as well as other commercial and industrial uses based on its resistance to harsh chemicals and high temperatures. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS was previously used as a major ingredient in aqueous film forming foams for firefighting and training, and PFOA and PFOS are found in consumer products such as stain resistant coatings for upholstery and carpets, water resistant outdoor clothing, and grease proof food packaging. Although the use of PFOA and PFOS has decreased substantially, contamination is expected to continue indefinitely because these substances are extremely persistent in the environment and are soluble and mobile in water.

Secondary Contaminant	Level Detected	Units of Measurement	RUL
Iron	58.00	ppb	300
Manganese	5.81	ppb	50
Sodium	72.50	ppm	50

## Iron

The secondary Recommended Upper Limit (RUL) 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 RUL could develop deposits of iron in a number of organs in the body.

## Manganese

The secondary Recommended Upper Limit (RUL) for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.

## **Sodium**

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 (RUL) may be of concern to individuals on a sodium restricted diet.

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.

(1) **Total Coliform.** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

(2) **Barium.** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(3) **Copper.** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(4) **Cyanide.** Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

(5) **Fluoride.** Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

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

(7) **Nitrate.** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(8) **Alpha emitters.** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(9) **Combined Radium 226/228.** Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

(10) **TTHMs [Total Trihalomethanes].** 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.

Contaminants that may be present in source water include:

X Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

X Inorganic contaminants such as salts and metals which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

X Pesticides and herbicides which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

X 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 storm water runoff and septic systems.

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

### **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. The Borough of Elmer Water Dept. 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>.

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 contamination 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, and synthetic organic chemicals. Our system received monitoring waivers for both of these types of contaminants.



## **Facts About 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	2-3 gallons (per minute)
Outside Faucet	3-5 gallons (per minute)

## **Security:**

In light of the events of the past year and in response to the States Domestic Security Preparedness Act, the Borough of Elmer has reviewed the security of our facilities and our operations. We will continue to review these elements of our water system and remain observant of all our facilities and vital assets.

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.

**We at the Borough of Elmer Water Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water resources which are the heart of our community and our way of life.**



**BOROUGH OF ELMER**

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