Annual Drinking Water Quality Report

Borough of Elmer

Water Department

For the Year 2020

Results From the Year 2018 & 2019

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We are pleased to present this year's Annual Drinking Water Quality Report. This report is designed to inform you about where your water comes from, what the tests show, and other facts about drinking water quality.

We are committed to ensuring the quality of your water. This report shows our water quality and what it means to you as a consumer of our precious resource.

WATER SOURCE:

Your water comes from two municipal ground water wells sunk approximately 500' into an underground source of water called the Mount Laurel-Wenonah Aquifer. 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 41 million gallons in 2019 representing total water consumption from both Wells # 6 and # 8. Each well alternates 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.

IMPROVEMENTS:

The Borough of Elmer is moving forward with capital improvements to upgrade the water system.

The elevated water tank was completely refurbished in 2017 under the New Jersey Environmental Infrastructure Trust (NJEIT) loan and forgiveness program. The Borough of Elmer received a forgiveness grant up to 50% of the cost of the entire project. The upgrade included painting both the interior and exterior of the elevated water storage tank and additional repairs to the structure of the tank. Additional improvements and upgrades included a new generator, process control equipment, painting of the well house, and security fencing around the perimeter of the water storage tank.

The Borough of Elmer is complying with the New Jersey Department of Environmental Protection (NJDEP) Water Accountability Act passed into law in October of 2017. The new requirements are to develop an Asset Management Plan, GIS mapping of the water system, hydrant labeling and inspection, and valve operation inspection.

We encourage public participation at our regular council meetings which are held on the second Wednesday of each month at 7:30 pm in the Borough Municipal Building at 120 South Main Street in Elmer.

SOURCE WATER ASSESSMENTS:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for the Borough of Elmer Water System.

The Source Water Assessment was performed on our two existing wells (Well #6 & Well #8) that deliver water to our water system. A susceptibility rating was used for the Borough of Elmer wells. These ratings ranged from low, medium, or high for a particular category. There were no areas in the report that demonstrated a high susceptible contaminant category.

The information on the Source Water Protection Program can be obtained by logging onto NJDEP's source water web site at www.state.nj.us/dep/swap/ or by contacting NJDEP Bureau of Safe Drinking Water at 609-292-5550.

You may also contact Borough Clerk Sarah Walker at the Borough of Elmer at 856-358-4010 ext 110.

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.

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 materials and can pick up substances resulting from presence of animals or 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 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 use.

* 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.

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

In order to ensure that the tap water is safe to drink, EPA prescribes regulations which limit the amounts 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 for 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).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people 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 infection. These people should seek advice from their health care providers.

EPA/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).

SPECIAL CONSIDERATION Regarding Children, Pregnant Women, Nursing Mothers, and Others:

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Nitrate:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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.

The Borough of Elmer is pleased to inform you that the nitrate analyses taken in 2019 were far below the Maximum Contaminant Level (MCL).

Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home plumbing. If you are concerned about lead levels in your home water supply, you may wish to have your water tested. It is recommended to flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791) or http://www.epa.gov/safewater/lead.

TABLE DEFINITIONS:

In the table that follows, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we have provided the following definitions:

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

Parts per million (ppm) or milligrams per liter(mg/L): One part per million is the equivalent of one penny in $10,000.

Parts per Billion (ppb): The equivalent of one penny in $10,000,000.00.

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.

Maximum Contaminant Level Goal (MCLGs): 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.

Source: The major origin of a compound detected in water.

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 contamination.

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.

WATER QUALITY TABLE

The Water Quality Table represents analysis taken in 2018 & 2019.

Water tests from analysis were taken at independent points of entry to the water system (well sites) and residential locations throughout the Borough of Elmer.

Regulated at Wells #6 & #8 at Point of Entry

Compound	Units	MCL	MCLG	Highest Level	Detection Range	Major Source	Violation
Gross Alpha	pCi/L	15	ND	2.45	ND	Erosion of natural deposits	No
Radium 228	pCi/L	5	0	0	ND to 1.5	Erosion of natural deposits	No
226 & 228 Combined	pCi/L	5	0	1.5	1.5 to 1.5	Erosion of natural deposits	No
Nitrate	**Ppm**	**10**	**10**	**0.15**	**0 to 1.5**	**Erosion of natural deposits**	**No**

Regulated at the Customers Tap

Lead	Ppb	15	0	3.3	ND to 3.3	Customer Plumbing and erosion of natural deposits	No
Copper	Ppm	1.3	1.3	.198	ND to .198	Customer Plumbing and erosion of natural deposits	No
Total-Tri Halomethane	Ppb	80	n/a	6.7	3.65 to 6.17	Bi-product of chlorination	No
Haloacetic Acids	Ppb	40	n/a	5.04	2.4 to 5.04	Bi-product of chlorination	No

Secondary Analysis:
Regulated at Wells #6 & #8 at Point of Entry

Sodium	Ppm	50	n/a	69.4	60.7 to 69.4	Erosion of natural deposits	Yes

Water Quality Footnotes:

1. The Borough of Elmer tested for lead and copper at 10 locations throughout the water system in 2018. There were no MCL violations. The next round of lead and copper sampling will be in the summer of 2021.

2. The Borough of Elmer does not add fluoride to the water supply. However, natural fluoride was detected at a level of .65 ppm at Well #6 and .64 ppm at Well #8 in 2018. Parents of young children may want to consult with their dentist about their need for fluoride treatments. The next round of fluoride analysis will be in 2021.

3. Two (2) samples for arsenic were tested at each well prior to entering the water distribution system in 2018. We are happy to inform you that **no arsenic** was detected during this past round of sampling. The next round of arsenic testing will be in 2021 in conjunction with the inorganic sampling requirements.

4. The Borough of Elmer sampled and tested for inorganic and secondary compounds at each well in 2018. There were no MCL violations with the exception of sodium as stated in the below notice. The next round of sampling will be in 2021.

5. The Borough of Elmer is required to test for two (2) coliform bacteria per month. We are happy to report that all coliform samples were negative in 2018.

6. The Borough of Elmer was required to test radionuclide's compounds at Well #6 point of entry in 2018. The test results were far below the limit set by the NJDEP and the next round for Well #6 and Well #8 well will be in 2021.

7. Testing for perfluoroctane sulfonic acid (PFOS), perfluoroctanoic acid (PFOA), and perfluorononanoic acid (PFNA) was completed in 2019. All test results were negative. The Borough of Elmer was granted a reduction in sampling by the NJDEP to annual in 2020.

Sodium:

Even though sodium is not regulated by the Federal Safe Drinking Water Act, the NJDEP has set a limit of 50 ppm as the MCL. We tested for sodium at both wells point of entry to the water system in 2018 which indicated a level of 69.8 ppm at Well # 6 and 60.7 ppm at Well # 8.

The state requires us to contact the local health department, local doctors, and hospitals when we exceed the 50 ppm level. Sodium is naturally occurring in underground aquifers. Sodium levels above the secondary recommended levels may be of concern to individuals on low sodium diets.

They may want to consult with their doctors to see if these levels could cause health problems. For healthy individuals, the sodium intake for water is not important, because a much greater intake of sodium takes place from salt in the diet. The sodium found in Elmer's water is from natural erosion. For more information on sodium contact the Salem County Health Department at 856-935-7510.

Unregulated Contaminants:

The Borough of Elmer is not required by the EPA or NJDEP to test for cryptosporidium or radon at this time.

Additional Contaminants Monitored:

The Borough of Elmer tested for volatile organic contaminants at Well # 6 and Well # 8 in 2018. No levels of volatile organics were detected. The next round of sampling will be required in 2021.

In our continuing efforts to maintain a safe, dependable water supply it may be necessary to make improvements to the municipal water system.

WATER METER AND RATES:

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.

You are billed for water consumption on a quarterly basis. The bill will reflect the previous three months of consumption and will include a quarterly service charge based on the size of your meter as listed in the following chart.

Below are the current **water rates** and service charges; see Chapter 14 of the Code of the Borough of Elmer online under 'Borough Ordinances' at www.elmerboroughnj.com and also at https://clerkshq.com//Content/Elmer-nj/books/code/Elmerc14.htm.

14-1.12 Water Rate.

Water shall be billed at the rate of three ($3.00) dollars per one thousand (1,000) gallons of metered flow. (Ord. No. 99-11 § 15; Ord. No. 2011-3; Ord. No. 2013-4)

14-1.13 Advanced Quarterly Service Charges.

Advanced quarterly services charges shall be charged as follows:

a. **Size of Meter**	**Service Charge**
5/8" x 3/4"	$60.00
1"	$60.00
1 1/2"	$136.00
2"	$240.00
2 1/2"	$391.00
3"	$540.00

b. The foregoing charges do not include any water use.
(Ord. No. 99-11 § 16; Ord. No. 2011-3; Ord. No. 2013-4; Ord. No. 2018-12)

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 years 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.

This report was developed by ***Water Resource Management, Inc.*** should you have any questions on the content of the report, please feel free to contact:

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