

PWSID# 1702001

Annual Drinking Water Quality Report  
Borough of Elmer Water Department  
For the Year 2009  
Results From the Year 2006, 2007 & 2008

We are pleased to present this years; 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 54 million gallons in 2008 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, increase fire fighting capabilities at the various fire hydrants located throughout the water system and supply stored 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 has completed an inspection of the elevated storage tank. The purpose of the inspection is to budget cost for improvements and prepare for cleaning and painting of the tank. The inspection revealed no major structure problems.

Additional capital improvements are being planned to upgrade the water system over the next five years.

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. The location of the meetings is located at 120 South Main Street in Elmer.

## Source Water Assessments:

The New Jersey Department of Environmental Protection 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 (#6 & 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/](http://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 Beverly Sue Richards at the Borough of Elmer at 856-358-4010 ext 10.

The following information is required by the United States Environmental Protection Agency (USEPA) and the New Jersey Department of Environmental Protection Bureau of Safe Drinking Water, to be placed in all Consumer Confidence Reports.

**Consumer Confidence Reports.** 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 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 at (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 month 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 2008 were far below the MCL.

**Lead:**

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 and 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).

**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've 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.

**MCL ( Maximum Contaminant Level)**- 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.

**MCLGs ( Maximum Contaminant Level Goal)**- 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 2008

### Regulated at Wells # 6 & 8 at point of entry

Inorganic Compound	Units	MCL	MCLG	Highest Detecti on	Range	Major Source	Violation
Barium	Ppm	2.0	2.0	.025	.0189-.0231	Erosion of natural deposits	No
Gross Alpha	pCi/L	15	0	2.45	0 to 2.45	Erosion of natural deposits	No
Radium 228	pCi/L	5	0	1.22	0 to 1.22	Erosion of natural deposits	No
<b>Nitrate</b>	<b>ppm</b>	<b>10</b>	<b>10</b>	<b>.12</b>	<b>.12 to .18</b>	<b>Erosion of natural deposits</b>	<b>No</b>

### Regulated at the Customers Tap

Lead	ppb	15	0	11.8	0 to 11.8	Customer Plumbing and erosion of natural deposits	No
Copper	ppm	1.3	1.3	.256	.007 to .256	Customer plumbing and natural erosion of natural deposits	No
Total-Tri-Halo-methane	ppb	80	n/a	3.0	3.0 to 3.0	Bi-product of chlorination	No
Halo-acetic Acids	ppb	40	n/a	2.0	2.0 to 2.0	Bi-product of chlorination	No

## Water-Quality Footnotes

1. The Borough of Elmer is required by NJDEP to test for Coliform bacteria at two (2) locations per month in the water distribution system. No samples tested positive in 2008.
2. The Borough of Elmer tested for lead and copper at 10 locations throughout the water system in 2006. There were no MCL violations. The next round of lead and copper sampling will be this year during the summer month.
3. A waiver was issued by NJDEP for Asbestos sampling on 6/20/94. The waiver was granted since no Asbestos was detected during the past round of sampling.
4. A waiver was issued for Pesticides and Synthetic Organic Compounds on 2005-2007. The waiver was granted from information submitted to NJDEP on potential health risk assessment of these contaminants.
5. The Borough of Elmer does not add fluoride to the water supply. However, natural fluoride was detected at a level of .66 ppm at # 6 Well and .73 ppm at # 8 Well in 2006. Parents of young children may want to consult with their dentist about their need for Fluoride treatments.
6. Two (2) samples for arsenic were tested at each well prior to entering the water distribution system in 2006. We are happy to inform you that **no arsenic** was detected during this past round of sampling.
7. The Borough of Elmer sampled and tested for Inorganic and Secondary Compounds at each well in 2006. There were no MCL violations with the exception of Sodium.
8. The Borough of Elmer was required to test Radionuclides compounds at each well (#6 & #8) point of entry in 2006. These tests are based on four (4) consecutive quarterly analysis. The test results were far below the limit set by the New Jersey DEP. A reduction in sampling was granted by NJDEP. These compounds are naturally occurring in the aquifer.
9. The Borough of Elmer will be required to test for Inorganic, Secondary's and Volatile Organic Compounds at each well site in 2009. Lead and Copper Analysis will also be required in 2009 at selected locations in the Elmer Water System. These water analysis are required every (3) years.

## 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 in 2008 which indicated a level of 68.6 ppm at # 6 well and 74.8 ppm at # 8 well.

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.

## 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 2006. No levels of Volatile Organics were detected. The next round of sampling will be required this year as stated in the water-quality footnotes.

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

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.

Ordinance 99-11 was adopted amending ordinance 99-7 which implemented the rate structure for water service.

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. There has been no rate increase since 1999.

As a reminder to you, the Borough is billing at \$2.60 per 1,000 gallons of metered flow.

The quarterly service charge shall be as follows:

<b>Size of Meter</b>	<b>Service Charge</b>
5/8" x 3/4"	\$20.00
1"	\$20.00
1.5"	\$45.00
2"	\$80.00
3"	\$180.00

The service charge covers the cost of meter reading, customer billing and administrative cost not dependent upon water use. This cost is in addition to the charge for water consumption based on the size of the water meter. There has been no service charge increase since 1999.

### **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:

**The events of September 11 have re-focused attention to the importance of our drinking water supplies throughout the United States. The Borough of Elmer has taken the necessary steps to insure the safety of our water supply.**

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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