Annual Drinking Water Quality Report

EDINBORO WATER AUTHORITY

PWSID 6250022

One Monitoring Violation in 2017

We're 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 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. We are committed to ensuring the quality of your water. Our water source is a well field located on Edinboro University Campus. There are two wells that are between sixty and sixty-five feet in depth.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak to someone who understands it.)

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Chris Motter, Water Department Superintendent, at Edinboro City Hall, between the hours of 8:00 A.M. and 3:00 P.M. Telephone 734-1812 ext 141. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of the public Water Authority meetings. These meetings are advertised and are held every other month at City Hall. Please call for time and date if you are interested in attending any meetings (734-1812).

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).

In November 2011 DEP approved the Borough's Source Water Protection Technical Assistance Program (SWPTAP). The Assessment found that the Borough's wells are potentially most susceptible to contamination from agriculture, geothermal well’s, above and underground fuel tanks, and industry using any petroleum solvents or manmade degreasing solvents. Overall the Edinboro
Water Authority wells have a moderate risk of contamination. Summary reports of the Assessment are available at the Edinboro Borough Office or at DEP in Meadville, PA at 230 Chestnut Street phone number (814)-332-6984.

**Edinboro Water Authority** routinely monitors for constituents 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, 2017. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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

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

**Maximum Contaminant Level Goal** – (MCGL) – 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 Level 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 contaminants.

**Action Level** (AL) – 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.

\[
\text{ppm} = \text{parts per million, or milligrams per liter (mg/L)} \\
\text{pCi/L} = \text{picocuries per liter (a measure of radioactivity)} \\
\text{ppb} = \text{parts per billion, or micrograms per liter (ug/L)}
\]
# New Table: Entry Point Disinfectant Residual

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Minimum Disinfectant Residual</th>
<th>Lowest Level Detected</th>
<th>Range of Detections</th>
<th>Units</th>
<th>Sample Date</th>
<th>Violation Y/N</th>
<th>Sources of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>0.92</td>
<td>0.682</td>
<td>0.682-1.218</td>
<td>ppm</td>
<td>03/21/2017</td>
<td>N</td>
<td>Water additive used to control microbes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contaminant (Unit of Measurement)</th>
<th>Violation Y/N</th>
<th>Level Detected</th>
<th>Range Mg/l</th>
<th>MCL in CCR units</th>
<th>MCLG</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>N</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

## Microbiological Contaminants

### Chemical Contaminants

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Minimum Level Detected</th>
<th>Range Mg/l</th>
<th>Sample Date</th>
<th>Violation Y/N</th>
<th>Sources of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium (ppm)</td>
<td>08/11/2015</td>
<td>0.0407</td>
<td>2</td>
<td>N</td>
<td>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>08/22/2015</td>
<td>0.978</td>
<td>2</td>
<td>N</td>
<td>Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Nitrate (ppm)</td>
<td>08/8/2017</td>
<td>1.06</td>
<td>10</td>
<td>N</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
</tr>
</tbody>
</table>
Lead and Copper Rule

<table>
<thead>
<tr>
<th>Lead (ppb)</th>
<th>N</th>
<th>0 (2016)</th>
<th>a</th>
<th>AL=15</th>
<th>0</th>
<th>Corrosion of household plumbing systems; Erosion of natural deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppm)</td>
<td>N</td>
<td>0.071 (2016)</td>
<td>a</td>
<td>AL=1.3</td>
<td>1.3</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
</tbody>
</table>

Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals

<table>
<thead>
<tr>
<th>Haloacetic Acid</th>
<th>N</th>
<th>3.17 (2017)</th>
<th>b</th>
<th>60</th>
<th>n/a</th>
<th>By-product of drinking water disinfection</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTHMs [Total trihalomethanes] (ppb)</td>
<td>N</td>
<td>9.01 (2017)</td>
<td>b</td>
<td>80</td>
<td>n/a</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Chlorine (ppm)</td>
<td>N</td>
<td>0.71-0.95</td>
<td>MRDL = 4</td>
<td>MRDLG = 4</td>
<td>Water additive used to control microbes</td>
<td></td>
</tr>
</tbody>
</table>

Footnotes:
(a) There were zero (0) samples of the 20 taken above its respective action level. Lead and Copper testing is done every three (3) years. The next tests are in July 2019
(b) Disinfectants Byproduct Rule started January 2004.

You will notice that Trichloroethylene (TCE) was not included in our chart of test results. That is because we had no readings of TCE in any of our finished water samples that we take for VOC’S. TCE is still in our raw water but the Air Stripping Tower removes it and any other VOC’S before entry into the distribution system.

HEALTH EFFECTS LANGUAGE:
Microbiological Contaminants
Total Coliform Bacteria - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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

Fluoride (ppm) - This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but
children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency’s drinking water standard) can increase your risk of developing bone disease.

**Nitrate (ppm)** - 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.

**Trichloroethylene (ppb)** - Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

**Lead (ppb)** - Infants and young 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 and high blood pressure.

**Copper (ppm)** - 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.

**Haloacetic Acids (HAA) (ppb)** - Some people who drink water containing halo acetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**TTHMs [Total trihalomethanes] (ppb)** - 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.

**Chlorine (ppm)** - Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

**Special Educational Statement:**

Lead (ppb) – 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 Edinboro Water Authority is
responsible for providing high quality drinking water, but can not 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at http://www.epa.gov/safewater/lead.

As you can see by the table, our system had no MCL violations. We’re proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected.

POTENTIAL CONTAMINANTS:
All sources of drinking water are subject to potential contaminants that are naturally occurring or man made. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

Violation:
The Borough of Edinboro had one monitoring violation in 2017. The samples for Uranium where taken in November of 2017. A lot of times with specific test laboratories will forward to a different laboratory. That is what happened in this case, the samples were forwarded to a different laboratory. The samples were tested and past all regulations. The reason for the Monitoring Violation is that the Laboratory sent the Borough the results but did not enter the results to DEP before the 10th of the month. That is why we received a monitoring violation. Even though we did not cause the delay, and we have no control of the Laboratory, it falls back on to the water system to make sure everything is done on time, including all laboratory testing.

Drinking Water Sources:
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 use.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial process and petroleum production and mining activities.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a dependable water supply we sometimes need to make improvements that will benefit all our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

The new Water Plant is being built and should be finished in July. The two (2) Million Gallon Storage Tank was put on hold for the winter but construction renewed the first of April, finish date late July. The water main replacement program is progressing and should be done in late June/early July. The new water meter project should also finish up in June.

This year the water department will be exercising and replacing main valves along with upgrading, replacing and adding new fire hydrants. We are also looking at replacing the 4-inch main water line on West Normal Street with an 8-inch main. That line is a dead end at the bridge but we would like to join it to Water Street. This may not make it this year but we are designing it.

Security for water systems has become very important since 9/11. We are doing every thing we can to insure that your drinking water is safe. Be alert if you notice unusual activity or suspicious person or persons in or around fire hydrants, wells, air stripping tower and the large storage tanks please notify the Edinboro Police Department at 814-734-1712.

Please call our office if you have question or input about this report.

We at the Edinboro Water Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our
community, our way of life and our children's future.

Consumer Confidence Report prepared by Chris Motter, Water Department Superintendent.
If you have any questions please call 734-1812 between 8:00 A.M. and 3:00 P.M.