

## ***2018 Annual Drinking Water Quality Report***

BOROUGH OF FREELAND MUNICIPAL AUTHORITY  
PWSID # 2400054

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. *(This report contains important information about your drinking water. Have someone translate it for you or speak to someone who understands it.)*

We're pleased to once again present the 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. We are committed to ensuring the quality of your water.

If you have any questions about this report or concerning your water utility, please contact the **Authority Office Staff at (570) 636-1733**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings.

**Your water is drawn from six (6) wells.** Five (5) of these wells draw water from the Buck Mountain/Mauch Chunk Aquifer and include the following: Wells No. 11, No. 4, No. 6, No. 9, No. 10.

The sixth well, Well No. 17, draws water from the Green Mountain/Mauch Chunk Aquifer. A seventh well, Well No. 12, was taken out of service in February 2015. Well No. 12 also draws water from the Buck Mountain/Mauch Chunk Aquifer.

A *Source Water Assessment* of our source(s) was completed by the PA Department of Environmental Protection (PADEP). While a few potential sources of contamination were identified (landfills, deep coal and surface coal mining, etc.), it was determined the potential risks from these sites were quite small. If you want to learn more about our Source Water Assessment, please visit our office at 711 Birkbeck Street, Freeland, PA, and a summary is available on the ***Source Water Assessment & Protection*** web page at (<http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm>). Complete reports were distributed to municipalities, water suppliers, local planning agencies, and PADEP offices. Copies of the complete report are available for review at the Northeastern Regional Office, Records Management Unit at (570) 826-2511.

**Our Water Board meets** on the third Wednesday of the month, at 6:00 PM in the Authority Office located at 711 Birkbeck Street, Freeland, PA. Please feel free to participate in these meetings.

***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 microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.***

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 EPA's **Safe Drinking Water Hotline at (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, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it 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 and residential uses.
- *Radioactive contaminants*, which are naturally occurring.
- *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.

**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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Water Quality**

The Borough of Freeland Municipal Authority routinely monitors for constituents in your drinking water according to Federal and State laws. We tested for over 70 drinking water contaminants during the past 5 years. Not all of these contaminants are required to be tested every year. Of the more than 70 contaminants tested, only 4 contaminants were detected and no MCLs or treatment techniques were exceeded. These 4 contaminants and their potential sources of contamination are shown on the tables on the following pages.

The following tables list all the drinking water contaminants that we detected during the 2018 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1- December 31, 2018. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than 1 year old.

### **Definition of Terms used in Report:**

**Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**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 (MCLG):** 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. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Parts Per Billion (ppb):** Unit of concentration equivalent to micrograms per Liter ( $\mu\text{g/L}$ ).

**Parts Per Million (ppm):** Unit of concentration equivalent to milligrams per Liter ( $\text{mg/L}$ ).

**Picocuries Per Liter (pCi/L):** Unit of measure for radiation.

**Running Annual Average (RAA):** Quarterly calculation using previous 12 monthly averages.

#### DETECTED SAMPLE RESULTS - DISTRIBUTION SYSTEM

DISINFECTION BYPRODUCTS (DBPs) AND DISINFECTANT RESIDUALS								
Contaminant	MCL	MCLG	Max. Value Detected	Avg. Value Detected	Range of detections	Sample Year	Violation Y/N	Typical Sources of Contaminant
Chlorine (ppm)	MRDL = 4.0	MRDLG = 4.0	Max: 1.19 Range: 0.30 – 1.19			2018	N	Water additive used to control microbes.
Total TTHMs <sup>1</sup> (ppb)	80	NA	0.0			2018	N	By-product of drinking water disinfection

<sup>1</sup>TTHM represents Total Trihalomethanes

LEAD AND COPPER								
	AL	MCLG	90th Percentile Value	Max. Value Detected	# of Sites Above AL	Sample Year	Violation Y/N	Typical Sources of Contaminant
Copper (ppm)	1.3	1.3	0.19	0.31	0 out of 20	2016	N	Corrosion of household plumbing.

#### DETECTED SAMPLE RESULTS – ENTRY POINTS

Contaminant	MCL	MCLG	Level Detected	Sample Year	Violation Y/N	Typical Sources of Contaminant
<b>WELL NOS. 4, 6, AND 11 (EP-101)</b>						
Nitrate (ppm)	10	10	3.69	2018	N	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.
<b>WELL NO. 9 (EP-102)</b>						
Nitrate (ppm)	10	10	3.07	2018	N	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.
<b>WELL NO. 10 (EP-103)</b>						
Nitrate (ppm)	10	10	1.79	2018	N	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.
<b>WELL NO. 12 (EP-105)</b>						
Nitrate (ppm)	10	10	1.18	2018	N	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.

WELL NO. 17 (EP-104)						
Nitrate (ppm)	10	10	0.00	2018	N	Erosion of natural deposits. Runoff from fertilizer use. Leaching from septic tanks.

#### ENTRY POINT DISINFECTANT RESIDUAL

Disinfectant	Min. Residual Level Req'd	Min. Level Detected	Range of detections	Sample Year	Violation Y/N	Typical Sources of Contaminant
WELL NOS. 4, 6, AND 11 (EP-101)						
Chlorine (ppm)	0.40	0.43	0.43 – 1.45	2018	N	Water additive used to control microbes.
WELL NO. 9 (EP-102)						
Chlorine (ppm)	0.40	0.40	0.40-1.42	2018	N	Water additive used to control microbes.
WELL NO. 10 (EP-103)						
Chlorine (ppm)	0.40	0.45	0.43-1.18	2018	N	Water additive used to control microbes.
WELL NO. 17 (EP-104)						
Chlorine (ppm)	0.80	0.80	0.80-1.11	2018	N	Water additive used to control microbes.

#### Contaminants Tested But Not Detected

Parameters tested but not detected in your drinking water include:

- Total Coliform Bacteria
- Free Cyanide
- Gross Alpha
- Lead
- Nitrite
- 11 Metals: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Fluoride, Mercury, Nickel, Selenium and Thallium
- Radium-226 and Radium-228
- 30 Synthetic Organics (SOCs)
- Haloacetic acids (HAA5)
- Uranium
- 21 Volatile Organics (VOCs)

#### Violations

The Freeland Borough Municipal Authority is 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. These monitoring results must be reported to PA DEP within specific time frames as required. In 2018, there were no violations within the Freeland Borough Municipal Authority System.