2018 DRINKING WATER QUALITY REPORT
DANVILLE MUNICIPAL AUTHORITY—PWS ID 4470007

DANVILLE MUNICIPAL AUTHORITY AND DANVILLE BOROUGH are pleased to provide you with our 2018 Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our constant goal is to provide to you 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 your water utility, please contact Brad Horne, Water Superintendent, 570-275-1070. 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 Authority meetings. They are held at 10:00 a.m. on the third Monday of each month at 42 West Market Street, Danville. Authority members are Pete Rickert, Chairman; Max VonBlohn, Vice-Chairman; Betty Ann Moyer, Treasurer; Richard Blosky, Secretary; and James Shutt, Assistant Secretary and Assistant Treasurer.

Water Supply System

Our water source is the North Branch of the Susquehanna River. During 2018, we treated just under 630 million gallons, or an average of 1.73 million gallons per day of water from this surface water supply source. Our peak day of water production occurred on Nov. 13, 2018, when 2.77 million gallons were pumped into the system.

The Danville water system serves 1,941 residential connections representing a population of nearly 4,700 people. Water service is also provided to 176 commercial, 8 industrial, 16 institutional and 4 bulk water customers. An aerial photograph of the water treatment plant is depicted below.

In order to ensure that your tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water supply systems. We are pleased to report that your drinking water meets all Federal and State requirements.

Aerial View of Danville Water Treatment Plant

Contamination Potential

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 the raw (source) water before treatment 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products 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 the result of oil or gas production and mining activities.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. 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 (800-426-4791) or visiting the EPA Office of Water website at http://water.epa.gov/drink/index.cfm.

Vulnerability

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) or visiting the EPA Office of Water website at http://water.epa.gov/drink/index.cfm.

Lead in Drinking Water

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. Danville Municipal Authority 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, testing methods, and steps you can take to minimize exposure is available from EPA Safe Drinking Water Hotline (800-426-4791) or the EPA website at www.epa.gov/safewater/lead.

Monitoring

The Danville Municipal Authority routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows our monitoring results for the period January 1 to December 31, 2018. This table shows only the contaminants that were detected and the level at which they were detected. There were many other contaminants that we tested for in 2018 that were not detected. The Authority is not required to sample for all contaminants every year. Therefore, the data shown in the table are for the most recently collected sample for each contaminant. Remember that the presence of certain contaminants does not necessarily pose a health risk. All drinking water may be reasonably expected to contain at least small amounts of some contaminants.

Definitions

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

- Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.
- Nephelometric Turbidity Unit (NTU) - A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Non-Detect (ND) - Laboratory analysis indicates that the constituent is not present.
- Not Applicable (N/A) - Does not apply.
- Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to 1 minute in 2,000 years, or a single penny in $10,000,000. 1,000 ppb = 1 ppm.
- Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to 1 minute in 2 years, or a single penny in $10,000. 1 ppm = 1,000 ppb.
- Picocuries per liter (pCi/L) - Measurement of the natural decay rate of disintegration of radioactive contaminants.
- Running Annual Average (RAA)
- Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- < - Less than the value indicated.
- ≤ - Less than or equal to the value indicated.

DANVILLE MUNICIPAL AUTHORITY
2018 TEST RESULTS - DETECTED CONTAMINANTS

Contaminant (Unit of Measurement)	Violation** Yes / No	Level Detected	Range	MCLG/ MRDLG	MCL/ MRDL	Likely Source of Contamination
Turbidity Contaminants						
Turbidity[1] (NTU)	No	**0.2** (Highest Single Value for Combined Filters)	**0.02– 0.2**	0	TT = 1 NTU for a Single Measurement	Soil runoff.
		100% (Lowest Monthly Percentage of Samples ≤ 0.3 NTU)			TT = At Least 95% of Monthly Samples ≤ 0.3 NTU	

[1]Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

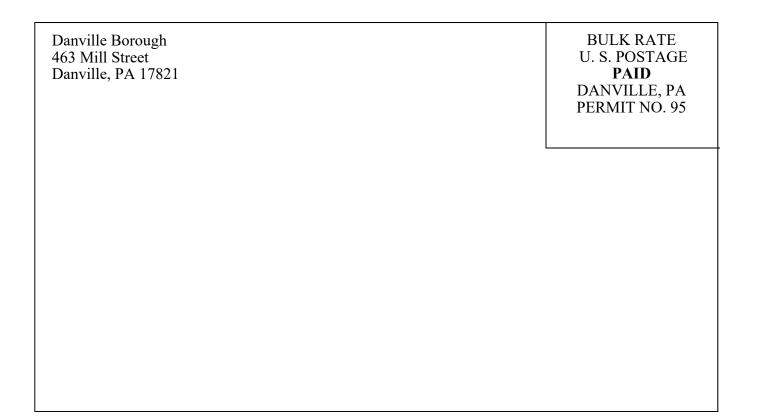| Contaminant (Unit of Measurement)	Violation** Yes / No	Level Detected	Range	MCLG/ MRDLG	MCL/ MRDL	Likely Source of Contamination
Inorganic Contaminants						
Barium (ppm)	No	**0.028**	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits.
Chromium (ppm)	No	**0.001**	N/A	0.1	0.1	Discharge from steel and pulp mills; Erosion of natural deposits.
Copper* (ppm)	No	**0.149** (90th Percentile Value)	**0.004– 0.19** (None of 20 Samples Exceeded the Action Level)	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead* (ppb)	No	**1.83** (90th Percentile Value)	**0.0 – 2.7** (None of 20 Samples Exceeded the Action Level)	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Nickel (ppm)	No	**.001**	N/A	0.1	N/A	Corrosion of bronze.
Nitrate (measured as Nitrogen) (ppm)	No	**0.226**	N/A	10	10	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits.
Disinfectants & Disinfectant By-Products						
Chlorine (ppm) Entry Point	No	**0.68** (Lowest Value)	**0.68 – 1.58**	N/A	MinRDL = 0.2	Water additive used to control microbes.
Chlorine (ppm) Distribution System	No	**1.03** (Highest Monthly Avg.)	**0.5 – 1.03** (Monthly Avg. Range)	4	4	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	No	**23.4** (Highest RAA)	**18.0 - 30.5**	N/A	60	Byproduct of drinking water disinfection.
Total Trihalomethanes (TTHMs) (ppb)	No	**21.9** (Highest RAA)	**7.8 - 55.5**	N/A	80	Byproduct of drinking water disinfection.
Total Organic Carbon Removal						
Total Organic Carbon (TOC) Removal Ratio	No	**1.41** (Lowest Running Annual Average Removal Ratio)	**.46– 3.32** (Monthly Removal Ratios)	N/A	TT = 1 or Greater, Running Annual Average Removal Ratio	Naturally present in the environment.

 *Lead and copper results are from testing in 2016.

**Two regulatory samples were missed during 2018. One sample was Benzo-A-pyrene which is a synthetic organic compound . It was missed for the first quarter and sampled all the rest. There were no detectable results for the remainder of the samples. The other sample missed was volatile organic compounds. This sample the year before was a non-detect. The VOC sample will resume being sampled in 2019.

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Summary

As you can see by the data in the Table of Detected Contaminants, our water system had no water quality violations in 2018. We're proud that your drinking water not only meets, but is better than all Federal and State requirements. Through our monitoring and testing programs, some contaminants have been detected. However, the EPA has determined that your water is safe at these levels for the general population. Immuno-compromised persons may be more vulnerable to contaminants in drinking water than the general public and, as such, should discuss this report with their health care providers.

In 2003, a Source Water Assessment was completed for the Authority that identified and evaluated potential contamination threats to the Authority's raw water source. The assessment found that our source water is potentially most susceptible to contamination from transportation corridors (road, rail and bridge), boating, auto repair shops, truck/bus terminals, salt storage, utility substations/power plants, and stormwater runoff from residential developments, farms, and golf courses. Overall, our source water has a moderate risk of significant contamination. A summary report of the Assessment is available on the *Source Water Assessment & Protection Web* page at:

http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4537. The Authority has developed a source water protection program for the North Branch of the Susquehanna River.

Landlords, apartment managers, businesses, schools, and others are encouraged to share this Drinking Water Quality Report with all water consumers at their respective locations. We thank you for your cooperation in distributing this important information.

The Danville Municipal Authority and Danville Borough work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life, and our children's future.

Este informe contiene información importante acera de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

Danville Municipal Authority Public Water System Identification Number: 4470007