



2019 WATER QUALITY REPORT

Pittsburgh, McMurray, Mon-Valley
Public Water Supply ID# PA5020039



Este informe contiene información importante acerca de su agua potable. Haga que 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 if needed.)

A Message from the President



At Pennsylvania American Water, our customers are at the center of everything we do. That’s why we work 24 hours a day, seven days a week to protect our water supplies and provide our communities with safe, clean tap water that meets or surpasses drinking water standards. We care about protecting our precious water resources, and we invest millions of dollars in technology and equipment to test and monitor our drinking water supplies.

I am pleased to share with you another excellent report on the quality of your drinking water. As you read through this annual water quality information, you will see that we continue to supply high quality drinking water to keep your life flowing.

Last year, we invested \$366 million to upgrade our water and wastewater treatment and pipeline systems across the Commonwealth. That means we invested more than \$500 for every one of our water and wastewater customers in 2019 alone. These investments allowed us to improve water quality, water pressure and service reliability for our customers.

We take water quality so seriously that 33 of our water treatment plants have been nationally recognized with Directors Awards from the U.S. Environmental Protection Agency’s (EPA) Partnership for Safe Water program for surpassing federal and state drinking water standards. And, we remain committed to protecting our sources of drinking water. We utilize advanced technology and detection methods that are paving the way for source water protection across the country.

In the fall of 2019, we completed our lead and copper sampling program, which is required every three years by the EPA. This effort included collecting 1,300 water samples from homes across the Commonwealth – above and beyond the 15,000 water samples we collect across our systems throughout the year for other routine testing. I am proud to share that all of our systems meet state and federal regulations for lead and copper, which demonstrates that our corrosion control treatment continues to be effective in protecting our customers’ health.

We hope our commitment to you and our passion for water shines through in this report detailing the source and quality of your drinking water in 2019. We will continue to work to keep your life flowing – today, tomorrow and for future generations.

Proud to be your local water service provider,

F. Michael Doran
Senior Vice President, Mid-Atlantic Division &
President, Pennsylvania American Water



QUALITY. ONE MORE WAY WE KEEP LIFE FLOWING.

Our Mark of Excellence

With a history dating back to 1886, American Water Works Company, Inc. (NYSE:AWK) is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to help keep their lives flowing. For more information, visit www.amwater.com and follow American Water on [Twitter](#), [Facebook](#) and [LinkedIn](#).

Pennsylvania American Water Company, a subsidiary of American Water, is the largest investor-owned water utility in the Commonwealth, providing high-quality and reliable water and/or wastewater services to approximately 2.4 million people.

Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

What Can You Do? Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Dispose of pharmaceuticals, household chemicals, oils and paints at proper waste collection sites. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground. Contact your county waste authority to find out how to dispose of these materials properly.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag in the trash.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Look for local opportunities to take part in watershed activities.
- Report any spills, illegal dumping or suspicious activity to DEP here: <https://www.dep.pa.gov/About/ReportanIncident/Pages/default.aspx>

What Are We Doing? Our vision is *Clean Water for Life*. Our priority is to provide reliable, quality drinking water for our customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply.

We have developed a Source Water Protection Plan under the Pennsylvania Source Water Protection Technical Assistance Program (SWPTAP). This is a voluntary program to identify and address potential threats to drinking water supplies. Stakeholder involvement is an important part of the program. We partner with DEP to host annual meetings to review progress on the plan with stakeholders. We also welcome input on the plan or local water supplies through our online feedback [form](#).

Here are a few of the efforts underway to protect our shared water resources:

- **Community Involvement:** We have a proactive public outreach program to help spread the word and get people involved. This includes school education, contests, and other community activities. For more information, visit: <https://amwater.com/paaw/news-community/community-involvement>
- **Environmental Grant Program:** Each year, we fund projects that improve water resources in our local communities. In 2019, eight organizations received grant funds totaling around \$40,000 for local watershed projects. For more information on the program, visit: <https://amwater.com/paaw/news-community/environmental-grant-program>.



- **Pharmaceutical Collection:** We sponsor drop box locations across the Commonwealth for residents to safely dispose of unwanted drugs for free. This helps keep pharmaceutical products from entering water supplies. For drop box locations near you, visit: <https://amwater.com/paaw/water-quality/pharmaceuticals-and-drinking-water>.

To learn more about your water supply and local activities, please contact the regional Source Water Protection Lead, Josh Dunkle at 724-873-3667.

Other Water Quality Parameters of Interest

Is there lead in your 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. Pennsylvania American Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. We do take steps to reduce the potential for lead to leach from your pipes into the water. This is accomplished by adding a corrosion inhibitor to the water leaving our treatment facilities. There are also steps that you can take to reduce your household's exposure to lead in drinking water. 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. For more information, please review our Lead and Drinking Water Fact Sheet at <https://amwater.com/paaw/water-quality/lead>.

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 or at: [U.S. Environmental Protection Agency Web Page on Lead](https://www.epa.gov/lead)

Does your water contain nitrates and nitrites?

The normal range of nitrate levels is below the MCL of 10 ppm. The normal range of nitrite levels is below the MCL of 1 ppm. Nitrate and nitrite enter the water supply from fertilizers used on farms and natural erosion of deposits in the watershed. Levels above the MCL are a health risk for infants under six months of age and can cause blue baby syndrome. Check with your physician if you have questions.

How hard is your water?

Hardness is a measure of the concentration of two minerals naturally present in water – calcium and magnesium. High hardness levels cause soap not to foam as easily as it would at lower levels. Hardness levels in 2018 ranged from 36 to 181 ppm, or 2 to 11 grains per gallon of water.

How much sodium is in your water?

The average sodium level from water leaving both treatment plants in 2019 was 21.2 ppm.

What is the pH (acidity) of your water?

Water in the distribution system averaged 7.5 pH units in 2019. A pH of 7.0 is considered neutral, neither acidic nor basic.

Is there fluoride in your water?

PAW adds fluoride at a level of near 0.7 ppm to assist in the prevention of dental cavities.

Partnership for Safe Drinking Water Program



In 2000, the Hays Mine and Aldrich Water Treatment Plants were awarded the prestigious Director's Award – Treatment under the Partnership for Safe Drinking Water Program. The program is administered by the EPA, the DEP, and other water related organizations. The award honors utilities for achieving operational excellence by voluntarily optimizing their treatment facility operations and adopting more stringent performance goals that those required by federal and state drinking water standards. We are proud to report that the Pittsburgh system has met the voluntary goals of the program for 19 consecutive years.



How to Contact Us

This report can be printed directly from this pdf document stored on our website at www.amwater.com/ccr/greaterpgh.pdf. Additional information can be gathered by calling our Customer Service Department at 1-800-565-7292 or by viewing the following information on the Internet:

[Pennsylvania American Water Web Page](#)

[Pa. Department of Environmental Protection Web Page](#)

[United States Environmental Protection Agency Web Page](#)

Safe Drinking Water Hotline: 1-800-426-4791

[Center for Disease Control and Prevention Web Page](#)

[American Water Works Association Web Page](#)

Substances Expected to be in Drinking Water

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. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Pennsylvania American Water's treatment processes are designed to reduce any such substances to levels below any health concern and the processes are controlled to provide protection against microbial and viral pathogens which could be naturally present in surface and groundwater.

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 EPA 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 persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and the United States Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline 1-800-426-4791.

The source of drinking water (both tap water and bottled water) includes 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 may 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 uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.



Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. If the organism was detected, current test methods do not allow us to determine if the organisms are dead or if they can cause disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. Based on the results of the first round of *Cryptosporidium* monitoring, no additional treatment was required by the US EPA regulations. The Hays Mine and Aldrich Stations completed a second round of source monitoring from the Monongahela River from April 2015 to March 2017. In this round of sampling, the highest 12-month mean of *Cryptosporidium* oocysts at the Aldrich Facility was 0.031 oocyst/L. The highest 12-month mean of *Cryptosporidium* at the Hays Mine Facility was 0.072 oocyst/L. Based on the results of the second round of *Cryptosporidium* monitoring, no additional treatment was required by the US EPA regulations.

How to Read This Table

Starting with a **Substance**, read across. **Year Sampled** is usually in 2019 or year prior. **MCL** shows the highest level of a substance (contaminant) allowed. **MCLG** is the goal level for that substance (goal may be set lower than what is allowed). **Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements. **Typical Source** tells where the substance usually originates. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

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Definitions of Terms Used in This Report

- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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.
- **MCLG (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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of 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.
- **NA:** Not applicable
- **NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of the water.
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- **mrem/yr (Millirems Per Year):** A measure of radiation absorbed by the body.
- **ppm or mg/L (parts per million):** One-part substance per million parts water, or milligrams per liter.
- **ppb or µg/L (parts per billion):** One-part substance per billion parts water, or micrograms per liter.
- **SS:** Single sample %: means percent >: means greater than <: means less than
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **90th Percentile:** The highest concentration of lead or copper in tap water that is exceeded by 10 percent of the sites sampled during a monitoring period. This value is compared to the lead and copper action levels (AL) to determine whether an AL has been exceeded.



Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing the results of the testing of your drinking water during 2019. The DEP allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, is more than one year old

Water Quality Results

Turbidity – A Measure of the Clarity of the Water at the Treatment Facilities

Location	Parameter	Year	MCL	MCLG	Highest Level Detected ¹	Compliance Achieved	Typical Source
Hays Mine Station (PAW)	Turbidity (NTU)	2019	TT= NTU for a single measurement	NA	0.12	Yes	Soil runoff
			TT= at least 95% of monthly samples ≤ 0.3 NTU		100%		
Aldrich Station (PAW)	Turbidity (NTU)	2019	TT= NTU for a single measurement	NA	0.10	Yes	Soil runoff
			TT= at least 95% of monthly samples ≤ 0.3 NTU		100%		
MAWC	Turbidity (NTU)	2019	TT= NTU for a single measurement	NA	0.08	Yes	Soil runoff
			TT= at least 95% of monthly samples ≤ 0.3 NTU		100%		

¹Turbidity readings were below the treatment technique requirement of 0.3 NTU in 95% of all samples taken for compliance on a monthly basis. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the efficacy of our clarification and filtration processes.

Total Organic Carbon Removal - Measured within the Treatment Facilities

Treatment Facility	Substance (units)	Year Sampled	TT	Percent Removal Required	Percent Removal Achieved ²	Compliance Achieved	Typical Source
Hays Mine	Total Organic Carbon (TOC) (% removal)	2019	Meet EPA Removal Requirements	25-35	18 – 28	Yes	Naturally present in the environment
Aldrich					16 – 37	Yes	
MAWC					23 – 36	Yes	

² In months that the percent achieved was below required, there was no exceedance of the TT because alternative compliance criteria was met as required by the PA Safe Drinking Water Act.

NOTE: Adequate removal of TOC may be necessary to control the unwanted formation of chlorinated by-products. Naturally occurring organic matter present in the source water can react with the disinfectants used at the treatment facility to form these by-products. There are several compliance criteria that can be used to meet this requirement.



Regulated Substances - Measured on the Water Leaving the Treatment Facilities

Location	Substance (units)	Year Sampled	MCL	MCLG	Average	Range Low - High	Compliance Achieved	Typical Source
Hays Mine Station (PAW)	Nitrate as Nitrogen (ppm)	2019	10	10	0.95	0.95 (SS)	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Aldrich Station (PAW)		2019	10	10	0.57	0.57 (SS)	Yes	
MAWC		2019	10	10	ND	ND	Yes	
Hays Mine Station	Fluoride (ppm)	2019	2	2	0.65	0.35 – 1.18	Yes	Added to water to promote healthy teeth
Aldrich Station		2019	2	2	0.67	0.48 – 1.01	Yes	
MAWC		2019	2	2	0.06	0.06 (SS)	Yes	
MAWC	Barium (ppm)	2019	2	2	0.04	0.04 (SS)	Yes	Discharge from drilling waste; erosion of natural deposits

Disinfectant Residual - Measured on Water Leaving the Treatment Facilities

Chlorine (mg/L)	Year Sampled	Minimum Disinfectant Level Required by DEP	Lowest Amount Detected	Range	Compliance Achieved	Typical Source
Hays Mine Treatment Plant	2019	0.20	1.40	1.40 – 3.35	Yes	Water additive used to control microbes
Aldrich Treatment Plant	2019	0.20	0.75	0.75 – 3.80	Yes	Water additive used to control microbes
MAWC	2019	0.20	1.00	1.00 – 2.00	Yes	Water additive used to control microbes

Disinfectant Residual - Measured in the Distribution System

Substance (units)	Year Sampled	MRDL	MRDLG	Highest Amount Detected	Range ³ Low - High	Compliance Achieved	Typical Source
Chlorine (ppm)	2019	4	4	3.67	0.02 – 3.67	Yes	Water additive used to control microbes

³95% of monthly chlorine residuals measured in the field must be above the regulation of 0.15 mg/L if the public water system collects more than 25 samples a month.



Tap Water Samples: Lead and Copper Results - Measured in the Distribution System

Substance (units)	Year Sampled	Action Level	MCLG	Highest Individual Sample Result	Number of Samples Taken	90th Percentile	Number of Samples Above the Action Level	Compliance Achieved	Typical Source
Lead (ppb)	2019	15	0	11	50	1	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2019	1.3	1.3	0.38	50	0.26	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits



Other Regulated Compounds - Measured in the Distribution System

Substance (units)	Year Sampled	MCL	MCLG	Results ⁴	Range ⁵ Low - High	Compliance Achieved	Typical Source
Total Trihalomethanes TTHM (ppb)	2019	80	NA	53.7	24.4 – 74.3	Yes	By-product of drinking water chlorination
Haloacetic Acids (HAA ₅) (ppb)	2019	60	NA	22.5	5.5 – 32.4	Yes	By-product of drinking water chlorination
Nitrate as Nitrogen (ppm)	2019	10	10	1.12	0.56 – 1.38	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite as Nitrogen (ppm)	2019	1	1	0.3	ND – 0.3	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

⁴ Highest locational running annual average from any one location.

⁵ Range represents individual sample point concentrations.



Notice of Unregulated Contaminant Monitoring (UCMR4)

Our water system completed monitoring for several unregulated contaminants in 2019. Unregulated contaminants are those that do not yet have a drinking water standard set by the EPA. The purpose of the monitoring for these contaminants is to help the EPA decide whether the contaminants should be regulated. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact the WQ Supervisor, Ryan Hardgrove, at 412.690.5436. The table below details the unregulated contaminants that were detected in the water system. For more information concerning Unregulated Contaminant Monitoring, visit this website:

<https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>

Unregulated Compounds - Measured on the Water Leaving the Treatment Facility and in the Distribution System

Substance (units)	Year Sampled	Average	MCL/MCLG	Range Low – High	Typical Source
Monobromoacetic Acid (ppb)	2019	0.03	Not regulated	ND – 0.31	By-product of drinking water chlorination
Dichloroacetic Acid (ppb)	2019	5.01	Not regulated	1.6 – 6.8	By-product of drinking water chlorination
Trichloroacetic Acid (ppb)	2019	5.33	Not regulated	3.0 – 6.8	By-product of drinking water chlorination
Bromochloroacetic Acid (ppb)	2019	2.51	Not regulated	1.2 – 3.6	By-product of drinking water chlorination
Dibromoacetic Acid (ppb)	2019	0.79	Not regulated	0.56 – 1.1	By-product of drinking water chlorination
Bromodichloroacetic Acid (ppb)	2019	4.33	Not regulated	3.7 – 5.1	By-product of drinking water chlorination
Chlorodibromoacetic Acid (ppb)	2019	2.18	Not regulated	1.3 – 3.5	By-product of drinking water chlorination
Manganese (ppb)	2019	3.28	300 (ppb) ⁶	0.55 – 6.9	Naturally occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient

⁶EPA has set a lifetime health advisory limit for Manganese of 300 ppb.

