ANNUAL WATER QUALITY REPORT

Reporting Year 2024

Presented By

Ambridge Water Authority

PWS ID#: 5040008

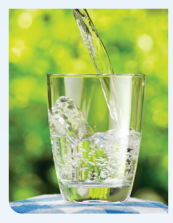
Ambridge Water Authority
P.O. Box 257
Ambridge, PA 15003

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. 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 and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?



Ambridge Water Authority (AWA) customers are fortunate to enjoy an abundant supply of water that comes from an outstanding source. Service Creek Reservoir is a spring-fed, surface water-influenced upland reservoir containing 3.5 billion gallons of water, which may well be the highest-quality source water in western Pennsylvania. This lake was created by AWA in the early 1950s. It is dedicated to providing water for the residents within our service area and our bulk water customers (consecutives). Your water is piped over seven miles from the AWA reservoir to our water treatment plant in Ambridge. The water is then treated and pumped to service Ambridge, Harmony Township, Economy, Bell Acres, Baden, parts of New Sewickley Township, and Edgeworth Municipal Authority (which also serves Leet Township and Leetsdale). This brings AWA's total population served to nearly 30,000! In 2024 our treatment facility provided an average of 3.18 million gallons per day of clean drinking water. Interconnects with neighboring West View Water Authority provide a backup supply of water in emergency situations. To learn more about our watershed, visit U.S. EPA's How's My Waterway at epa.gov/waterdata/hows-my-waterway.

Water Treatment Process

Raw water is pumped from the Service Creek Reservoir, pretreated with a disinfectant before reaching a surge tank, and then gravity-fed to the water treatment plant. The water then goes into a rapid mixing tank where a coagulant called DelPAC 2020 is added. DelPAC clumps together with small particles in the water to form floc. The heavier floc particles settle to the bottom of sedimentation basins for removal as wastewater. Caustic soda is added to the water to adjust the pH, and chlorine is added for predisinfection. The water is filtered through layers of fine anthracite coal and sand; this is our filtering media. After filtration the clean water is collected in a well at the water plant, and chlorine is added again as a precaution to disinfect any pathogens that may still be present. Finally, a corrosion inhibitor called orthophosphate is added to create a barrier between the drinking water and the distribution system piping.

The water is then pumped from the treatment plant via underground piping into water storage tanks and eventually to our homes and businesses. The entire process is operated by professionally trained, Pennsylvania-certified water plant operators. Water testing is done on a regular basis to ensure proper disinfection is being performed to protect our community.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. Environmental Protection Agency (U.S. EPA)/ 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 Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/safewater.

Source Water Assessment

Spotts, Stevens, and McCoy Inc., an environmental company under contract with DEP, performed a source water assessment in accordance with the Source Water Assessment Plan in 2002. This was done in accordance with requirements under the Safe Drinking Water Act. Land use is an important consideration in identifying potential point and nonpoint sources of contamination. Point sources are those that emanate from a known discharge location, such as an industrial outfall. Nonpoint sources are the runoff that occurs naturally through rainfall and snowmelt picking up potential contaminants, such as herbicides, or farming by-products, such as manure. In addition to point and nonpoint sources, accidental spills and known or unknown sources of contamination may occur, such as a spill during delivery of home heating oil or leaking from pipelines or gas and oil wells. These contamination sources are unlikely to occur because of the relatively undeveloped nature of the watershed. Watershed criteria that result in a high risk of contamination are transportation corridors, residential development, agriculture, and pipelines. Visit dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm for a summary of this report or information regarding the Source Water Protection Program. You may also contact the DEP regional office at (412) 442.4000.

In addition to the source water assessment, AWA has designed and implemented a Source Water Protection Plan (SWPP) to further protect the authority and its assets. This document will be updated and improved upon as deemed necessary by the authority. AWA's SWPP can be found at ambwater.org.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the third Tuesday of each month at 6:00 p.m. in Council Chambers at 600 11th Street.

Questions?

For more information about this report, or for any questions related to your drinking water, please contact Nate Protzman, General Manager, at (724) 266-3360.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and the Pennsylvania Department of Environmental Protection (DEP) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and DEP regulations establish limits for contaminants in bottled water, which must provide the same 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 uses;

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

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Test Results

We are pleased to report that your drinking water meets or exceeds all federal and state requirements. Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2024	2	2	0.023	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine [distribution] (ppm)	2024	[4]	[4]	1.81	0.25–1.81	No	Water additive used to control microbes
Chlorine [entry point] (ppm)	2024	MinRDL: SW=0.2/ GW=0.4	NA	0.90[1]	0.90–2.00	No	Water additive used to control microbes
Cyanide (ppb)	2019	200	200	4.1	NA	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Di(2-ethylhexyl) Phthalate (ppb)	2024	6	0	0.07	NA	No	Discharge from rubber and chemical factories
Dichloroacetic Acid (ppb)	2024	NA	NA	18.0	5.04–24.1	No	NA
Dissolved Organic Carbon [DOC][6] (ppm)	2024	NA	NA	2.1	1.64–2.86	No	NA
Fluoride (ppm)	2024	2	2	0.107	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	39.2[2]	23.9–48.8	No	By-product of drinking water disinfection
Monochloroacetic Acid (ppb)	2024	NA	NA	1.33	ND–1.76	No	NA
Nitrate (ppm)	2024	10	10	0.282	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorooctanoic Acid [PFOA] (ppt)	2024	14	NA	2.5	2.0–2.5	No	Used in the production of Teflon, firefighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
Specific Ultraviolet Absorbance [SUVA][7] (ppm)	2024	NA	NA	0.77	0.27–1.76	No	NA
Total Organic Carbon [TOC] (percent removal)	2024	TT[3]	NA	NA	2.8–67.4	No	Naturally present in the environment
Trichloroacetic Acid (ppb)	2024	NA	NA	26.6	15–33.2	No	NA
TTHMs [total trihalomethanes] (ppb)	2024	80[4]	NA	59.3[2]	27.5–93.2	No	By-product of drinking water disinfection
Turbidity[5] (NTU)	2024	TT	NA	0.26	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff
UV254[8] (cm-1)	2024	NA	NA	1.39	0.50–3.45	No	NA

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	0.17	0.004–0.24	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2024	15	0	11	ND–11	0/30	No	Corrosion of household plumbing systems, Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Fluoride[9] (ppm)	2024	2.0	NA	0.107	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2024	7.86	5.44–9.49	NA
Chlorodibromomethane (ppb)	2023	0.063	ND–1.01	NA
Chloroform (ppb)	2024	48.5	39.1–55.8	NA

[1] Lowest level detected.
[2] Running annual average.
[3] To be in compliance, 35% removal of TOC is required. When 35% removal cannot be achieved, AWA uses the SUVA method as an alternative method for TOC compliance.
[4] 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 system and may have an increased risk of getting cancer.
[5] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
[6] DOC is the accumulation of broken-down organic matter. We test this for the purpose of using it in the SUVA calculation.
[7] SUVA at 254 nm wavelengths (DOC/UV254 X 100 = ppm). This parameter is an alternative method for determining TOC.
[8] Ultraviolet absorbance at 254 nm. We test this for the purpose of using it in the SUVA calculation.
[9] AWA does not fluoridate the water. Trace amounts are naturally occurring within the environment.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

Lead in Home Plumbing

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 Ambridge Water Authority is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have your water tested, contact AWA at (724) 266-4910. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be reviewed at the Ambridge Water Authority office at 600 11th Street. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

PA000227

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

cm-1: Centimeter to the power of -1, a measure of UV254 representing absorbance per unit path length.

GW: Groundwater source.

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.

MinRDL (Minimum Residual Disinfectant Level): The minimum level of residual disinfectant required at the entry point to the distribution system.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

SW: Surface water source.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.