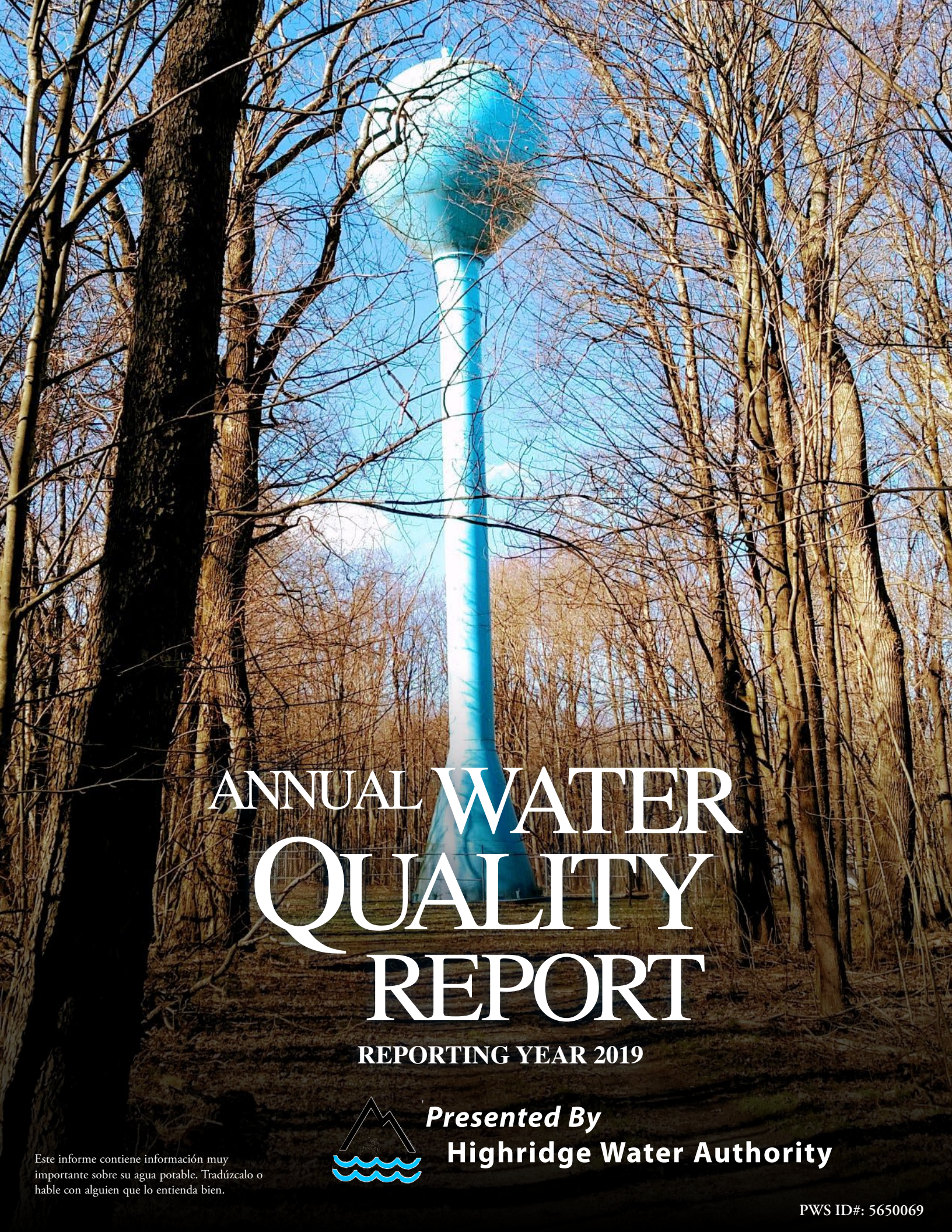


ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019

Presented By

Highridge Water Authority

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

PWS ID#: 5650069

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education, while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Viruses such as COVID-19 cannot be transmitted through drinking water or eating food. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 http://water.epa.gov/drink/hotline.

Community Participation

Highridge Water Authority (HWA) encourages its customers to participate in our meetings, held on the third Tuesday of each month at 6:30 p.m., in the Authority's James F. Conway conference room at 17 Maple Avenue in Blairsville.

Water Sources of Highridge

The water system is currently supplied by a series of mountain reservoirs with a combined total raw water storage capacity of approximately 400 million gallons.

These reservoirs, amidst western Pennsylvania's Laurel Mountains, are located on Tubmill Creek south of New Florence, and on Big Springs Run and Little Sugar Run outside the borough of Seward.

Additional Sources of Water

Highridge purchases small volumes daily from Blairsville Municipal Authority (BMA). BMA's source is located east of the village of Hillside on Chestnut Ridge in Derry Township.

Source Water Assessment

The greatest potential threats to Highridge's water supply sources are:

1. Accidents and spills along the roadways within the assessment area;
2. Potential contamination due to discharge from a small, residential wastewater plant;
3. Potential nonpoint source contamination associated with farming;
4. Activities using pesticides/herbicides, mining activities, logging activities, road de-icing, and aquatic wildlife; and
5. Leaks or spills from an underground fuel storage tank are also hazards.

A copy of the assessment can be viewed at Highridge's office located at 17 Maple Avenue, Blairsville, PA 15717.

Of the 463 million gallons of water sold to its customers, 709,335 gallons was purchased from Blairsville Municipal Authority. Those wishing to read their Source Water Assessment may wish to contact BMA directly at (724) 459-5020.

Questions?

For more information about this report, or for any questions related to your drinking water, please call George E. Sulkosky, Executive Director, at (724) 459-8033.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and DEP prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 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 may also come from gas stations, urban storm-water runoff, and septic systems;

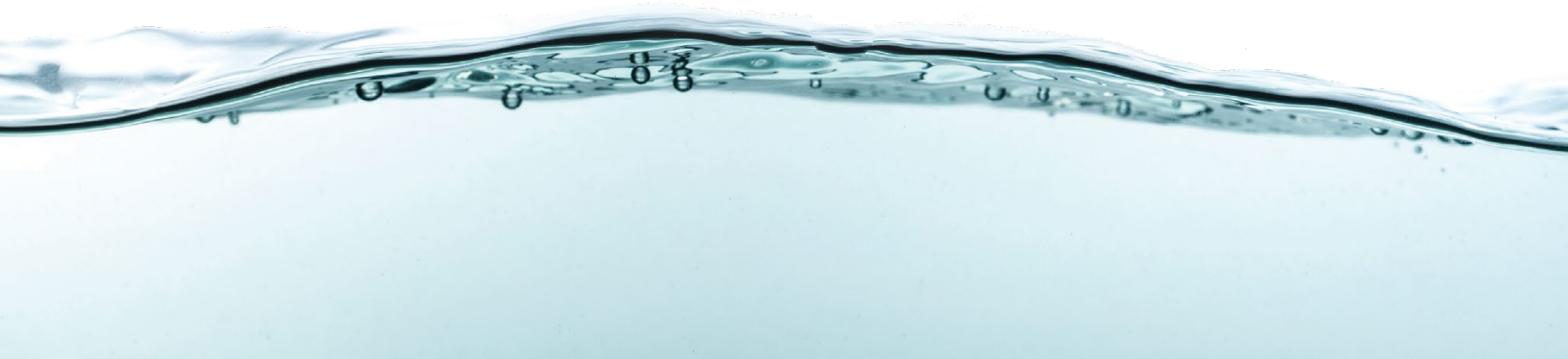
Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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

> "We remain vigilant in delivering the best-quality drinking water"

Lead in Home Plumbing

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. It's very soft metal and was never used to make large water mains. Although lead was used for centuries because of its resistance to pinhole leaks, it wasn't until the 20th century that the risks of lead plumbing became widely known. The U.S. Environmental Protection Agency (U.S.EPA) banned new lead service lines in the 1950s and has gradually eliminated lead in solder and household plumbing fixtures. Although HWA is responsible for providing high-quality drinking water, we cannot control the variety of materials used in household plumbing components. We will, however, require that you replace lead service lines. HWA has required new water lines to be made of PVC (plastic) for more than two decades. If 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. Lead is measured in parts per billion. Water companies cannot exceed 15 parts per billion (ppb). Analogies for 1 ppb would be one sheet of toilet paper in a roll of paper stretching from New York to London, one pinch of salt in 10 tons of potato chips, or 1 second in nearly 32 years. When drinking water is monitored according to federal and state regulations, the risk of human exposure to lead in water is negligible. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/lead.



Test Results

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 are included, along with the year in which the sample was taken.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				Highridge Water Authority		Blairsville Municipal Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2019	2	2	0.036	0.0302–0.036	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine [distribution] (ppm)	2019	[4]	[4]	0.87	0.58–0.87	1.22	0.36–1.22	No	Water additive used to control microbes
Chlorine [entry point][1] (ppm)	2019	MinRDL: SW=0.2/ GW=0.4	NA	0.75	0.75–1.5	0.55	0.55–1.5	No	Water additive used to control microbes
Cryptosporidium	2018	TT	0	0.30	0.195–0.30	NA	NA	No	Naturally present in the environment
Fluoride (ppm)	2019	2	2	NA	NA	0.73	0.73–0.73	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2019	60	NA	45.1975[2]	2.3–107	19.0625	4–26	Yes	By-product of drinking water disinfection
Nitrate (ppm)	2019	10	10	0.47	0.47–0.47	0.14[3]	0.14–0.14[3]	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes][4] (ppb)	2019	80	NA	47.925[5]	19–94.7[5]	33.325	16–57	No	By-product of drinking water disinfection
Total Organic Carbon[6] (ppm)	2019	TT	NA	ND	ND	0.9	0.7–1.1	No	Naturally present in the environment
Turbidity[7] (NTU)	2019	TT	NA	0.09	0.02–0.09	NA	NA	No	Soil runoff

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Highridge Water Authority: AMOUNT DETECTED (90TH %ILE)	Highridge Water Authority: SITES ABOVE AL/TOTAL SITES	Blairsville Municipal Authority: AMOUNT DETECTED (90TH %ILE)	Blairsville Municipal Authority: SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	1.3	0.05	0/30	0.028	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	0	0/30	0	1/20	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Highridge Water Authority: AMOUNT DETECTED	Highridge Water Authority: RANGE LOW-HIGH	Blairsville Municipal Authority: AMOUNT DETECTED	Blairsville Municipal Authority: RANGE LOW-HIGH	TYPICAL SOURCE
Chlorodibromomethane (ppm)	2019	0.00017	0–0.001	0.000915	0–0.0021	By-product of drinking water disinfection
Chloroform (ppm)	2019	0.0427225	0.0163–0.0854	0.0269125	0.013–0.047	By-product of drinking water disinfection
Nickel (ppm)	2019	0.0016	0.0011–0.0016	NA	NA	Naturally present in the environment

UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Highridge Water Authority: AMOUNT DETECTED	Highridge Water Authority: RANGE LOW-HIGH	Blairsville Municipal Authority: AMOUNT DETECTED	Blairsville Municipal Authority: RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppm)	2019	0.00504	0.0027–0.0083	0.0055	0.003–0.008	By-product of drinking water disinfection
Dichloroacetic Acid (ppm)	2019	0.02034	0.0023–0.0451	0.0101125	0.002–0.016	By-product of drinking water disinfection
Monochloroacetic Acid (ppm)	2019	0.00017	0–0.0027	0.000625	0–0.003	By-product of drinking water disinfection
Trichloroacetic Acid (ppm)	2019	0.0246	0–0.0588	0.008325	0.002–0.0125	By-product of drinking water disinfection

[1] The amount-detected value for chlorine [entry point] represents the lowest level that was detected.

[2] Despite high readings, compliance is determined by the running annual average from sampling throughout the system. The average for 2019 for HAAs was 45 ppb, well below the maximum level of 60 ppb.

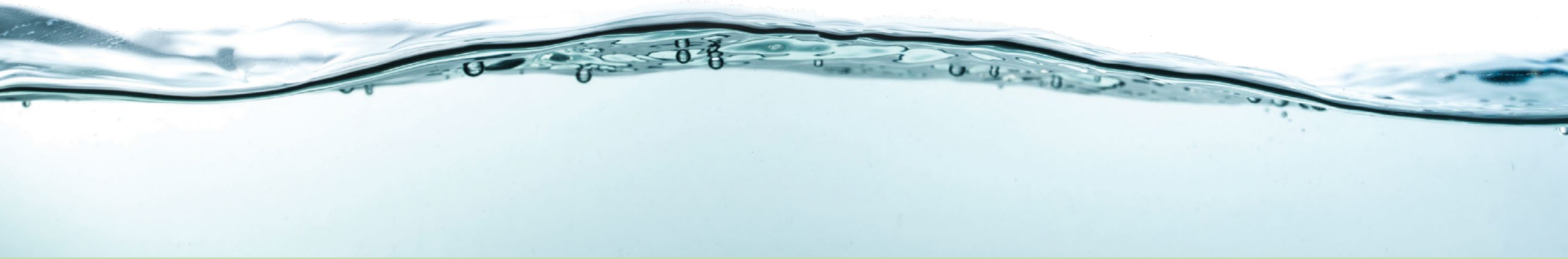
[3] Sampled in 2018.

[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 systems, and may have an increased risk of getting cancer.

[5] Despite high readings at several locations, compliance is determined by the running annual average from quarterly sampling throughout the system. The average for 2019 for TTHMs was 48 ppb, well below the maximum level of 80 ppb.

[6] The value reported under Amount Detected for TOC is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.

[7] Turbidity is a measure of the cloudiness of the water. We monitor turbidity to check the effectiveness of our filtration system.



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.

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).

SW: Surface water source.

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

About Our Violations

During 2019, HWA was cited by the DEP for several reporting errors. Tests for Total Organic Carbons (TOC) were completed, but submitted past the required deadline. A data entry error occurred when reporting results for total alkalinity, and the testing lab charged with submitting results of a chlorine sample inadvertently failed to submit the results to the DEP. Since each was a reporting violation and not an exceedance violation, there was no impact on public health and safety and no corrective actions were necessary. Better oversight of the reporting requirements will ensure that such errors are not repeated in the future.

Monitoring results for the third and fourth quarters of 2019 indicated that a portion of the water system exceeded the standard or maximum contaminant level (MCL) for HAAs. Despite high readings, compliance is determined by the running annual average from sampling throughout the system. The average for 2019 for HAAs was 45 ppb, well below the maximum level of 60 ppb. HWA treats its surface water source and uses chlorine for disinfection prior to distribution to its customer. Chlorination is the preferred method of public water disinfection and has been in use worldwide for over a century to eliminate such waterborne diseases as cholera and dysentery. Unfortunately, some of the chlorine used for disinfection combines with organic matter naturally present in the surface water to form chemicals called disinfection by-products (DBPs), including HAAs. Plans are being formulated to make sure this occurrence is not repeated. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

The Blairsville Municipal Authority (BMA) failed to report turbidity results in September and October by the required deadline, and failed to provide a Public Notification for not reporting cyanide results on time. Despite being cited, BMA had no water quality violations.