

# 2024 Water Quality Report

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**Altoona Water Authority**  
PWSID 4070023

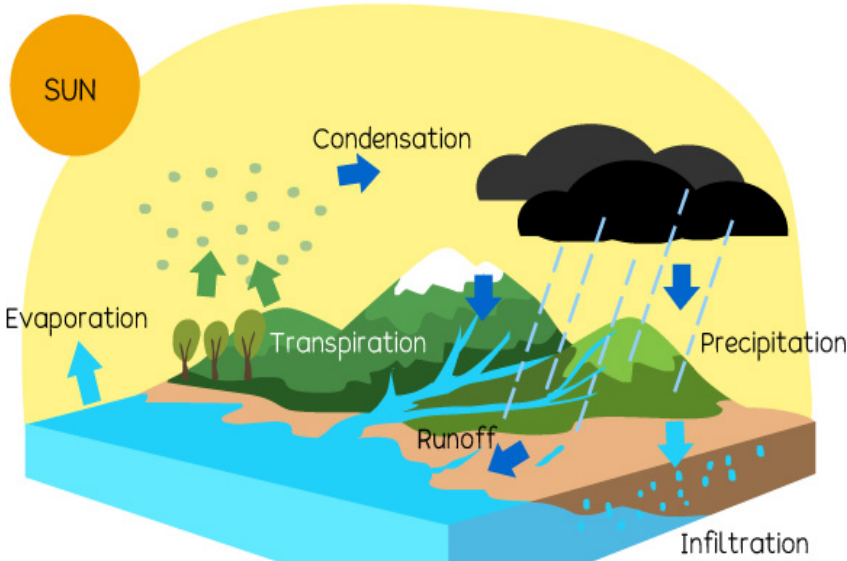
The Altoona Water Authority (AWA) is pleased to present the 2024 Annual Drinking Water Quality Report. This report provides information about your water system, the quality of your water and other important health related information. The U.S. Environmental Protection Agency and Pennsylvania Department of Environmental Protection require public water systems to provide annual Consumer Confidence Reports (CCR) to their customers.

Our mission at the AWA is to insure that we have a clean, safe, reliable water supply. The information, tabulations and data provided in this report clearly support that we are meeting or exceeding our goals and will continue to work diligently to guarantee water quality excellence and consumer confidence on a daily basis. Please visit our website at [www.altoonawater.gov](http://www.altoonawater.gov) to get the "clear facts" on your water system and the benefits publicly owned water systems bring to you.

You are invited to attend our regularly scheduled Board meetings. Meetings are held on the third Thursday of every month at 9:00am at the AWA's Administrative Office located at 900 Chestnut Avenue in Altoona. The AWA Board of Directors for 2024 are: **Chairman William Neugebauer, Vice Chairman Cory Gehret, Secretary Barbara Kooman, Treasurer Jesse Ickes and Asst. Sec./Treasurer Jack Speece.**

We hope you take the time to read this report. If you have any questions or would like additional information, please contact us at (814) 949-2222, or at [www.altoonawater.gov](http://www.altoonawater.gov). We also welcome the opportunity to give guided tours through any of our water treatment facilities.

*Este informe contiene información acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.*



## WATER QUALITY and HEALTH RELATED INFORMATION

The sources of drinking water (both tap 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 radioactive material and can pick up substances resulting from the presence of animals or human activity. Common contaminants that may be present in source water are listed in the 2024 Altoona Water Authority Water Quality Table.

All 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.

In order to ensure that tap water is safe to drink, the EPA prescribes monitoring to ensure that your drinking water does not exceed certain Maximum Contaminant Levels (MCLs). These MCLs are set at very stringent levels for the protection of public health. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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. The guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from The EPA/CDC Safe Drinking Water Hotline at 1-800-426-4791.



The AWA water supply originates from twelve (12) surface water locations in west-central Blair County. These twelve reservoirs, which are shown on the above map, are located in the Juniata River watershed of the Susquehanna River Basin. Potential source water contamination threats for our particular area include: transportation corridors, the Horseshoe Curve railroad tracks, illegal dumping, abandoned mine discharges, faulty septic systems and natural gas wells and pipelines.

The Altoona Water Authority has a complete Source Water Assessment and Protection Plan for the entire watershed system. Copies of the complete report are available for review. Please call (814) 949-2222 x2026, to set up an appointment. Summary reports are available at the Pennsylvania Department of Environmental Protection website. ([www.dep.state.pa.us](http://www.dep.state.pa.us), keyword "source water protection").

The AWA protects your watersheds. Before your drinking water reaches you, it is treated at one of our six (6) water treatment plants. Inside the treatment plants, water is first treated with ozone to destroy bacteria and other organisms such as Giardia and Cryptosporidia, oxidize metals and to reduce other organic materials that naturally occur in water. The water is then coagulated and flocculated. Water then passes through dual media filters, consisting of sand and coal, to remove sediment and particles. The filtered water is treated with a corrosion inhibitor to reduce its ability to react with water distribution pipes and customer plumbing systems. Finally, chlorine is applied to ensure the water is disinfected and safe before being distributed to our customers' homes and businesses.

The distribution system, storage tanks, and interconnections are tested rigorously and regularly. This testing regiment ensures that water quality in our distribution system complies with Safe Drinking Water regulations long after leaving our treatment facilities.

## INFORMATION ABOUT LEAD

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 services lines and home plumbing. Altoona Water 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, are available from the Safe Drinking Water Hot-line or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).





**AWA customers can find us at our website for updates, news, and other information.**

[www.altoonawater.gov](http://www.altoonawater.gov)

The AWA routinely monitors for contaminants in your drinking water according to Federal and State regulations. Throughout 2024, the AWA performed more than 3,000 tests for contaminants and is pleased to announce that we had no MCL violations. The Water Quality Table presents the results of our monitoring for the period of January 1 to December 31, 2024. The table shows the results for every regulated contaminant that we detected in the water, even in the minutest traces. The table contains the nature of each substance, the highest level allowed by regulation, the ideal goals for public health, the amount detected and the usual sources of contamination. It is also important to note that the table does not include more than 80 other contaminants that are routinely tested for, but these contaminants were all below the detectable levels. The following definitions of terms and abbreviations should further explain the table.

**Remember that all AWA employees must carry visible proper identification. If you are uncertain about anyone claiming to be an AWA employee, please do not allow them to enter your home. Contact us at 814-949-2222, x2001 to confirm the employee's validity.**



Unregulated Contaminants						
Contaminant Name	Sample Program	Highest Level Detected	Range detected	Potential Health Effects	Sources of Contamination	Violation by AWA
AM2						
HAA5	UCMR 4 - DISTRIBUTION	38.6 ppb	2.72 to 38.6 ppb	None known	Unknown	NO
HAA6Br	UCMR 4 - DISTRIBUTION	5.71 ppb	0.87 to 5.71 ppb	None known	Unknown	NO
HAA9	UCMR 4 - DISTRIBUTION	43.8 ppb	3.23 to 43.8 ppb	None known	Unknown	NO
AM1						
Manganese	UCMR 4 - EP 117 - KETTLE WTP	24.6 ppb	8.46 to 24.6 ppb	None known	Unknown	NO
Manganese	UCMR 4 - EP 119 - MILL RUN WTP	204 ppb	3.06 to 204 ppb	None known	Unknown	NO
AM2						
TOC	UCMR 4 - EP 117 - KETTLE WTP	2320 ppb	1360 to 2320 ppb	None known	Naturally present in the environment	NO
TOC	UCMR 4 - EP 119 - MILL RUN WTP	1510 ppb	887 to 1510 ppb	None known	Naturally present in the environment	NO
Public Water Suppliers serving a population over 10000 MUST participate in the EPA's SDWA Unregulated Contaminant Monitoring Rule Program These parameters were detected while complying with EPA's Unregulated Contaminant Monitoring Rule #4 2020(Kettle & Mill Run)						

The following definitions of terms and abbreviations should further explain the table:

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water.

**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.

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

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

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

**ppm** - Parts per million.

**ppb** - Parts per billion.

**pCi/L** - Pico curies per liter - a measure of radioactivity in water.

**cfu** - colony forming units - a measure of the heterotrophic plate count bacteria in water.

**ND** - non-detectable - the level of a contaminant is below the level of detection by laboratory analysis.

**NA** - not applicable.

2024 MONITORING VIOLATIONS			
VIOLATION ID	VIOLATION TYPE	DATE	CONTAMINANT
17706	M/R TO MONITOR OR PLAN - 27	01/01/24	TOTAL ALKALINITY

For more information on the 2024 Water Quality Report, call Irina Hott at 814-944-2320 or email her at [IHott@altoonawater.com](mailto:IHott@altoonawater.com)

2024 ALTOONA WATER AUTHORITY WATER QUALITY TABLE						
Contaminant Name	Highest Level Allowed	Treatment Goal MCLG	Highest Level Detected by AWA	Range of Detection by AWA	Sources of Contaminants in Drinking Water	Violation by AWA
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
Total Coliform Bacteria	Less than 1% positive of monthly samples	0	0.71%	0-0.71%	Naturally present in the environment.	NO
<b>TURBIDITY</b>						
Turbidity	Treatment Technique= 0.3 NTU 95% of monthly samples <=0.3 NTU	n/a	0.15 NTU Kettle (12/16/24) Lowest monthly % = 100%	0.02- 0.15 NTU	Soil runoff.	NO
<b>INORGANIC CONTAMINANTS</b>						
Barium	2.0 ppm	2.0 ppm	0.041 ppm	0.020 - 0.041 ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	NO
Bromates	10 ppb	10 ppb	HIGHEST RAA 1.18 ppb	ND - 3.30 ppb	By-product of drinking water chlorination.	NO
Fluoride	2.0 ppm	2.0 ppm	0.074 ppm	0 - .074 ppm	Erosion of natural deposits. Discharge from aluminum and fertilizer factories.	NO
Nitrate	10 ppm	10 ppm	0.682 ppm	.120 - .682 ppm	Erosion of natural deposits. Runoff from fertilizer use.	NO
Copper (2022)	1.3 ppm= Action Level (AL)	1.3 ppm	90th percentile 0.032 ppm	ND - 0.032 ppm NO LOCATIONS EXCEEDED AL	Corrosion of household plumbing.	NO
Lead (2022)	15 ppb= Action Level	N.D.	90th percentile 1.55 ppb	ND - 1.55 ppb NO LOCATIONS EXCEEDED AL	Corrosion of household plumbing.	NO
Total Trihalomethanes (TTHM)	80 ppb	n/a	Highest running annual average= 30.9 ppb	2.80 - 76.1 ppb	By-product of drinking water chlorination.	NO
Halogenated Acetic Acids (HAA5a)	60 ppb	n/a	Highest running annual average= 11.2 ppb	2.77 - 19.8 ppb	By-product of drinking water chlorination.	NO
Chlorine AWA Distribution System	4 ppm= Maximum Residual Disinfectant Level (MRDL)	4 ppm	Highest monthly average = 1.29 ppm (Feb 2024)	1.00 to 1.29 ppm Monthly Averages	Water additives used to control microbes.	NO
<b>SYNTHETIC ORGANIC CHEMICAL (SOC) - NO SOC'S DETECTED IN 2024</b>						
<b>VOLATILE ORGANIC COMPOUND (VOC)</b>						
Contaminant Name	Location ID	MCL	Result	Range of Detection	Sources	Violation by AWA
Carbon Tetrachloride (2024)	Distribution	5 ppb	3.33 ppb	0 - 3.33 ppb	Discharge from chemical plants and other industrial activities	NO
Ethylbenzene (2023)	Distribution	700 ppb	1.9 ppb	0 - 1.9 ppb	Found in solvents, paints, ink and rubber.	NO
Ethylbenzene (2021)	Bellwood EP 113	700 ppb	11.2 ppb	0 - 11.2 ppb		NO
Xylenes (Total) (2023)	Distribution	10 ppm	0.0101 ppm	0 - 0.0101 ppm	Found in ink, rubber and adhesives	NO
Xylenes (Total) (2021)	Bellwood EP 113	10 ppm	0.0911 ppm	0 - 0.0911 ppm		NO
<b>ENTRY POINT DISINFECTANT RESIDUAL</b>						
Contaminant Name	Location ID	Minimum Disinfectant Level Allowed	Lowest Level Detected	Range of Detections	Violation by AWA	
Chlorine	Tipton EP 111	0.2 ppm	1.31 ppm	05/25/24	1.31 - 2.04 ppm	NO
Chlorine (2022)	Bellwood EP 113	0.2 ppm	1.51 ppm	01/17/22	1.51 - 1.98 ppm	NO
Chlorine	Plane Nine EP 115	0.2 ppm	1.08 ppm	09/09/24	1.08 - 2.11 ppm	NO
Chlorine	HSC EP 116	0.2 ppm	1.47 ppm	09/03/24	1.47 - 2.04 ppm	NO
Chlorine	Kettle EP 117	0.2 ppm	0.78 ppm	10/09/24	0.78 - 2.14 ppm	NO
Chlorine	Mill Run EP 119	0.2 ppm	1.34 ppm	10/02/24	1.34 - 2.05 ppm	NO
<b>TOTAL ORGANIC CARBON (TOC)</b>						
Contaminant	Percent (%) Removal Required	Range of percent removal achieved	Number of months out of compliance			Violation by AWA
Total Organic Carbon	35%	13% - 34%	None - Met alternate compliance criteria			NO
<b>WATER QUALITY TABLE NOTES:</b>						
845 Distribution samples were collected in 2024. All analysis complied with SDWA standards.						
279 Special Samples & Check samples were collected in 2024. All analysis complied with SDWA standards.						
<b>RAW WATER QUALITY TABLE</b>						
<b>MICROBIOLOGICAL CONTAMINANTS</b>						
Contaminant Name	Highest Level Detected by AWA	Range of Detection by AWA	Sources of Contaminants in Drinking Water	Potential Health Effects	Violation by AWA	
Cryptosporidium	0.1 Cysts/100L	0 - 0.1	Naturally present in the environment.	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.	NO	
E. Coli Bacteria	ND	ND	Human and animal fecal waste.	Gastrointestinal disorder.	NO	
<b>TURBIDITY</b>						
Turbidity	18.7 NTU HSC (11/19/2024)	0.22 - 18.7 NTU	Soil runoff.	Interferes with disinfection and may indicate the presence of disease causing organisms.	NO	
<b>RAW WATER QUALITY TABLE NOTES:</b>						
The Altoona Water Authority began testing for E-Coli & Cryptosporidium in late 2015 to comply with the LT2 Enhanced Surface Water Treatment Rule. All results have been within normal, expected ranges. LT2 Testing for all sources was completed in February 2018.						