

## TERMS AND ABBREVIATIONS

- MCLG | Maximum Contaminant Level Goal:** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.
- MCL | Maximum Contaminant Level:** the "Maximum Allowed" MCL is 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.
- SMCL | Secondary Maximum Contaminant Level:** recommended level for a contaminant that is not regulated and has no MCL.
- AL | Action Level:** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
- TT | Treatment Technique:** a required process intended to reduce levels of a contaminant in drinking water.
- 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.
- ND | Non-Detects:** lab analysis indicates that the contaminant is not present.
- ppm | Parts per Million or milligrams per liter (mg/l)**
- ppb | Parts per Billion or micrograms per liter (µg/l)**
- pCi/L | Picocuries per Liter:** a measure of the radioactivity in water.
- mrem/yr | Millirems per Year:** measure of radiation absorbed by the body.
- MPA | Monitoring Period Average:** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.
- NTU | Nephelometric Turbidity Unit:** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.
- RAA | Running Annual Average:** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.
- LRAA | Locational Running Annual Average:** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Wheeling Water works around the clock to meet all regulations required by the Safe Drinking Water Act and provide quality water to all of our customers. The operation staff at our plant is highly trained, experienced and holds a minimum of a Class III Water Plant Operator's License. The facility is staffed 24 hours a day, 365 days a year.

We ask that you help support our water system and protect our water sources, which are the heart of our community.

Your Annual Water Quality Report is available at [www.wheelingwv.gov](http://www.wheelingwv.gov)

Photo: Wheeling Heritage

## ANNUAL WATER QUALITY REPORT

In compliance with the Safe Drinking Water Act and Environmental Protection Agency (EPA) requirements, Wheeling Water is pleased to submit information to all of our customers on the quality of our water. The following Water Quality Report details the water analysis from January 1 to December 31, 2024. Wheeling Water is committed to providing you with a clean and dependable supply of drinking water. The high quality of your water is the result of continuous monitoring by highly skilled water treatment professionals.

Our goal is to continue meeting or exceeding the high standards set forth by the EPA and the Safe Drinking Water Act. We hope that you will review the information contained in our Annual Water Quality Report and compare our water supply with the federal regulations. Please feel free to contact Michael Rice, Treatment Plant Manager, at 304-234-3835 with any questions or review our website. You may also attend any of the regularly scheduled City Council meetings held on the first and third Tuesday of each month at 5:30 p.m. in the Council Chambers of the City County Building, 1500 Chapline St., Wheeling, WV.

YOUR ANNUAL WATER QUALITY REPORT IS  
AVAILABLE AT [WHEELINGWV.GOV](http://WHEELINGWV.GOV)

WHEELING WATER has prepared a service line inventory identifying service line materials throughout the water distribution supply. The most up to date inventory is located at 9 Armory Drive. By November 1, 2027, our water system must develop an updated initial inventory, known as the "baseline inventory" and it must include each service line and identified connector that is connected to the public water distribution system.

## QUESTIONS?

If you would like more information or have any questions or concerns, please feel free to:

Review our website | [wheelingwv.gov](http://wheelingwv.gov)  
Contact the Plant Manager, Michael Rice | 304.234.3835  
Attend a City Council meeting | Held on the first and third Tuesdays of each month at 5:30 p.m. in the Council Chambers of the City Council Building, 1500 Chapline Street, Wheeling, WV 26003



CITY OF  
*Wheeling*  
WEST VIRGINIA

WHEELING WATER  
1551 RICHLAND AVE  
WHEELING, WV 26003

PSR STD  
US POSTAGE  
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WHEELING WV  
PERMIT NO. 101

# WHEELING WATER DEPARTMENT



## WATER QUALITY REPORT

### WHEELING WATER TREATMENT PLANT

Public Water Supply  
#WV3303516

1551 Richland Avenue  
Wheeling, WV 26003



[WHEELINGWV.GOV](http://WHEELINGWV.GOV) | 304.234.3835

2024

Published April 2025

# SOURCE WATER AND TREATMENT

The source of drinking water (both tap and bottled) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

## The Ohio River, which is surface water, is the source water for the Wheeling Water Treatment Plant.

The river has a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake will become contaminated; only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures.

The West Virginia Bureau for Public Health has completed a Source Water Assessment Report on Wheeling's source water, which includes more detailed information on this issue. The report is available for review by calling the Wheeling Water Treatment Plant at 304-234-3835.

The water is pumped from the Ohio River into the treatment plant where it is carefully treated, filtered and disinfected to ensure safe water to the customer. In addition to the Ohio River, there are seven wells located near the plant that may be utilized as an alternative source of water in the event the Ohio River becomes contaminated due to a spill. These wells, which are not under the influence of surface water, are treated the same way as the river water and can provide approximately 50% of the average daily usage.

The Ohio River is typically a reliable water supply. However, it is vulnerable to contamination. This requires a very diligent monitoring program and a sophisticated treatment facility to ensure that the water meets all state and federal health and safety regulations.

As the water quality of the Ohio River improves, it brings additional treatment problems, such as large quantities of algae and prolific growth of zebra mussels, which can plug intakes and foul treatment systems. These new problems have created additional expenses to meet the increasingly stringent requirements set by the EPA and ensure the quality of water our customers have come to expect.

The Wheeling Water Treatment Plant treats approximately 6.5 million gallons of water per day and distributes this water through 200 miles of water mains, some of which are over 100 years old. The maintenance and upgrade of this diversified system is reflected in periodic rate increases.

The West Virginia Bureau for Public Health has completed a Source Water Assessment Report on Wheeling's source water, which includes more detailed information on this issue. The report is available for review by calling the Wheeling Water Treatment Plant at 304-234-3835.

# CONTAMINANTS IN 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. We treat our water according to the EPA's regulations. Food and Drug Administration (FDA) regulations establish limits of 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 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's Safe Drinking Water Hotline (800-426-4791).

**Turbidity**, caused by soil runoff, is generally thought of as the cloudiness of water. We test turbidity because it is a good indicator of the effectiveness of our filtering system.

Although turbidity has no health effects, at high levels it can impair the disinfection process. The highest turbidity reading for 2024 was 0.090NTU and the lowest turbidity reading was 0.020 NTU. The yearly average was 0.033NTU.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses.

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Radioactive contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.

**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, and farming.

**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 storm water runoff, and septic systems.

Regulated contaminants	Collection date	Highest value	Range (low/high)	Unit	MCL	MCLG	Typical source
BARIUM	8/14/2024	41	41	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	8/14/2024	0.692	0.692	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE-NITRITE	2/15/2024	0.82	0.82	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Maximum Disinfection level 12/01/2024-12/31/2024	MPA	MPA Units	RAA	RAA Units
CHLORINE/CHLORAMINES	2.6	MG/L	2.44	MG/L

Chlorine can be solid, liquid, or a gas additive used to control microbes in drinking water. Drinking water that has not been treated with chlorine or some other form of disinfectant or process may or may not contain harmful bacteria. Untreated drinking water may cause gastrointestinal distress or other health problems.

Contaminant	Monitoring period	90th percentile	Range (low/high)	Unit	AL	Sites over AL	Typical source
COPPER, FREE	2020-2022	0.454	0.0592-0.72	ppm	1.3	1	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2020-2022	0.969	0-5.39	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

Secondary contaminants (non-health-based, no MCL)	Collection date	Highest value	Range (low/high)	Unit	SMCL
GIARDIA LAMBLIA	9/19/2018	1	0-1	-	1
PH	7/18/2018	7.93	7.59-7.93	SU	8.5
SODIUM	8/14/2024	26.4	26.4	mg/L	1000

Copper and lead samples were collected from 30 homes in our community water system in August 2022. Only the 90th percentile is reported.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. WHEELING WATER is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact WHEELING WATER and Lori Siburt at 304-234-3849. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

WHEELING WATER completed lead tap sampling in 2020 - 2022 the results are available for review and can be accessed by contacting Michael Rice at 304-234-3835.

Our water system identified **[lead, galvanized requiring replacement, or lead status unknown]** service lines in our inventory. Due to this identification our water system must create a service line replacement plan by November 1, 2027.

If you have any questions about our inventory or if you would like information about our service line replacement plan, please contact Lori Siburt at 304-234-3849.

Disinfection byproducts	Sample point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical source
TOTAL HALOACETIC ACIDS (HAA5)	1000 National Rd.	2024	20.6	9.9-42.1	ppb	60	0	Byproduct of drinking water disinfection
	139 E. Bethlehem Blvd.	2024	29.2	13.9-51.4				
	2538 National Rd. - Elm Grove Dodge	2024	26.6	14.6-40.2				
	32 Fieldcrest Dr. - Oakmont Tank Pit	2024	34.5	13.5-64.0				

Some people who drink water containing haloacetic acids (HAAs) in excess of the MCL over many years may have an increased risk of getting cancer.								
TRIHALOMETHANES (THM)	1000 National Rd.	2024	40.7	19.6-72.9	ppb	80	0	Byproduct of drinking water chlorination
	139 E. Bethlehem Blvd.	2024	57.0	25.6-100.1				
	2538 National Rd. - Elm Grove Dodge	2024	56.1	28.7-91.1				
	32 Fieldcrest Dr. - Oakmont Tank Pit	2024	67.7	28.6-119.3				

Some people who drink water containing trihalomethanes (THM) 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. Some people who drink water containing haloacetic acids (HAAs) in excess of the MCL over many years may have an increased risk of getting cancer.

UCMR 5	COLLECTION	VALUE	RANGE	UNIT
Perfluorobutanesulfonic acid (PFBS)	02/15/24	0.0035		ppb
Perfluorohexanesulfonic acid (PFHxS)	05/08/24	0.0033		ppb
Perfluorobutanesulfonic acid (PFBS)	08/14/24	0.0030		ppb
Perfluorobutanesulfonic acid (PFBS)	11/13/24	0.0037		ppb

## Unregulated Contaminant Monitoring

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Michael Rice at 304-234-3835 or 1551 Richland Ave, Wheeling.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. This notice is being sent to you by **Wheeling Water Department**.

State Water System ID# **3303516**

Date Distributed **6/1/2025**

Unresolved Deficiency Date Identified	Facility	Comments
8/12/23	CLEARVIEW TANK	The storage tank overflow is not properly screened. (64CSR77-9.1f.2) Please ensure proper screening is in place for the storage tank overflow.
	CLEARVIEW TANK	The storage tank vents are not properly screened. (64CSR77-9.1.c and 9.1.b) Please ensure proper screening is in place for the storage tank vents.
	MOZART	Booster station is subject to flooding. (64CSR77-8.1, 8.2 and 8.2.a) Please correct situation to where the booster station is not subject to flooding.
	WELL#7	A GWUDI evaluation has not been completed for the well. (64CSR77-5.3.b.1) Please complete a GWUDI evaluation for the well.
	WELL#8	A GWUDI evaluation has not been completed for the well. (64CSR77-5.3.b.1) Please complete a GWUDI evaluation for the well.