

**Some or all of these definitions may be found in this report:**

**Maximum Contaminant Level (MCL)** - 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.

**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 contaminants.

**Below Detection Levels (BDL)** - laboratory analysis indicates that the contaminant is not present.

**Not Applicable (N/A)** - does not apply.

**Parts per million (ppm)** - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** - or micrograms per liter, ( $\mu\text{g/L}$ ). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)** - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Variations & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

**Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.**

# Greenup Water System Water Quality Report 2024

For previous reports include year.  
Example: tapwaterinfo.com/2023/greenup

Water System ID: KY0450169

Manager:

606-547-2810

CCR Contact: Roger Harris

606-473-7331

firefighter\_harris@yahoo.com

Mailing address:

1005 Walnut St.

Greenup, KY 41144

Meeting location and time:

Greenup City Hall

Second Tuesday monthly at 6:00 PM

## Source Information:

The Greenup Water System withdraws surface water from the Little Sandy River. An analysis of the system's susceptibility to contamination yields a solid moderate ranking. Of the 156 potential contaminant sites, within the protection zones of the intake, 12 received a low ranking and 134 received a medium ranking with only 10 ranked high. Those ranked high include land used for row crops because of the possible use of pesticides, the city sewer system because of the possibility of breaks in a line, and the presence of bridges and culverts. Agricultural activity in this watershed is negligible and, therefore, the use of pesticides and herbicides and the danger of runoff contaminated thereby is greatly reduced. The threat posed by major roadways in the protection area in the event of accidental release of contaminants, though it exists, is moderate. The complete assessment is available for review at Greenup Water System. During peak summer usage, Greenup Water also purchases supplemental water from Cannonsburg Water District, who purchases water treated by Ashland Water. The source of water for Ashland is surface water from the Ohio River. An analysis of the source water indicates that its susceptibility to contamination is moderately high. Within the Kentucky portion of the protection zone alone, there are 535 identified potential contaminant sources. Of these, 302 have a susceptibility rating of high, 205 are rated medium and 28 are rated low. Not all contaminants with a high rating threaten the water supply equally. Oil spills which receive a high rating may float by the intake without a noticeable

effect; whereas chemicals that mix with the water present a different kind of threat. The City of Ashland also maintains a 25 million gallon reservoir allowing the intake to shut down for contaminants to pass. The reservoir provides a reliable source of raw water. The complete Source Water Assessment Plan is available for inspection at the FIVCO Area Development District.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 and, in some cases, radioactive material, and may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to 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 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. EPA/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 (800-426-4791).

## Information about Lead:

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. Your local water system 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, 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 in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

We are required to annually provide information about the health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling.

## Service Line Inventory Information:

To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office.

## Lead Sample Results Availability Information:

We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/L (15 ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

Regulated Contaminant Test Results								Greenup Water System		
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination		
<b>Radioactive Contaminants</b>										
Combined radium (pCi/L)	5	0	1.31	1.31	to	1.31	May-20	No	Erosion of natural deposits	
<b>Inorganic Contaminants</b>										
Barium [1010] (ppm)	2	2	0.029	0.029	to	0.029	Apr-24	No	Drilling wastes; metal refineries; erosion of natural deposits	
Fluoride [1025] (ppm)	4	4	1.00	1	to	1	Apr-24	No	Water additive which promotes strong teeth	
Nitrate [1040] (ppm)	10	10	0.272	0.272	to	0.272	Feb-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits	
<b>Disinfectants/Disinfection Byproducts and Precursors</b>										
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.44 (lowest average)	1.00	to	1.82 (monthly ratios)	2024	No	Naturally present in environment.	
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.										
<b>Other Constituents</b>										
Turbidity (NTU) TT	Allowable Levels		Highest Single Measurement		Lowest Monthly %		Violation		Likely Source of Turbidity	
* Representative samples	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.134		100		No		Soil runoff	
Turbidity is a measure of the clarity of the water and not a contaminant.										
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.30 (highest average)	0.4	to	2.1	2024	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	43 (high site average)	12	to	59 (range of individual sites)	2024	No	Byproduct of drinking water disinfection	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	74 (high site average)	28	to	99 (range of individual sites)	2024	No	Byproduct of drinking water disinfection.	
<b>Household Plumbing Contaminants</b>										
Copper (ppm) Round 1 sites exceeding action level 0	AL = 1.3	1.3	0.01 (90 <sup>th</sup> percentile)	0.004	to	0.012	Sep-23	No	Corrosion of household plumbing systems	
Lead (ppb) Round 1 sites exceeding action level 0	AL = 15	0	0 (90 <sup>th</sup> percentile)	0	to	3	Sep-23	No	Corrosion of household plumbing systems	
<b>Other Constituents</b>										
Turbidity (NTU) TT	Allowable Levels		Highest Single Measurement		Lowest Monthly %		Violation		Likely Source of Turbidity	
* Representative samples	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.069		100		No		Soil runoff	
Turbidity is a measure of the clarity of the water and not a contaminant.										

Fluoride (added for dental health)	Average	Range of Detection		
	1.0	0.82	to	1.23
Sodium (EPA guidance level = 20 mg/L)	13.9	13.9	to	13.9

Regulated Contaminant Test Results								Ashland Water Works			
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection		Date of Sample	Violation	Likely Source of Contamination			
<b>Inorganic Contaminants</b>											
Barium [1010] (ppm)	2	2	0.033	0.033	to	0.033	Mar-24	No	Drilling wastes; metal refineries; erosion of natural deposits		
Fluoride [1025] (ppm)	4	4	0.85	0.85	to	0.85	Mar-24	No	Water additive which promotes strong teeth		
Nitrate [1040] (ppm)	10	10	0.51	0.51	to	0.51	Feb-24	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits		
<b>Disinfectants/Disinfection Byproducts and Precursors</b>											
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.41 (lowest average)	1.09	to	1.69 (monthly ratios)	2024	No	Naturally present in environment.		
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.											
<b>Other Constituents</b>											
Turbidity (NTU) TT	Allowable Levels		Highest Single Measurement		Lowest Monthly %		Violation		Likely Source of Turbidity		
* Representative samples	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples		0.134		100		No		Soil runoff		
Turbidity is a measure of the clarity of the water and not a contaminant.											
<b>Unregulated Contaminants (UCMR 5) average range (ppb) date</b>											
perfluoropentanoic acid (PFPeA)					0.011	0	to	0.024	Nov-24		
<p>Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they 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 our office during normal business hours. No detections were found in the testing done at Greenup Water, but the detection from Ashland Water is listed in the table above.</p>											

Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection		Date of Sample	
Chloride	250 mg/l	20.8	20.8	to	20.8	Mar-24
Corrosivity	Noncorrosive	-1.54	-1.54	to	-1.54	Mar-24
Fluoride	2.0 mg/l	1.1	1.1	to	1.1	Mar-24
pH	6.5 to 8.5	7.42	7.42	to	7.42	Mar-24
Sulfate	250 mg/l	35.1	35.1	to	35.1	Mar-24
Total Dissolved Solids	500 mg/l	138	138	to	138	Mar-24

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water.