



Prestonsburg City's Utilities Commission

Annual Drinking Water Quality Report

Prestonsburg City's
Utilities Commission
2560 South Lake Drive
Prestonsburg, KY 41653

Office Hours
Monday – Friday
8:00am – 5:00pm

Customer Service Number
(606) 886- 6871

Emergency/After Hours
Number
(606) 886-2900
(606) 886-6871

If you would like to
present your questions
directly to the water
system you can contact:
Donald R. Compton
(Water Plant Supervisor)
or
Brian Music
(Distribution Supervisor)
at (606) 886-6871 during
regular office hours.

You are also invited to
attend any of our regular
scheduled meetings held
every 3rd Tuesday of each
month at 6:00pm at the
Prestonsburg City's
Utilities Commission
Office.

PWS # - KY0360358



This report is designed to inform you about the superior quality of water and services we deliver to you every day. Our 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 at the highest level.

**Prestonsburg City's Utilities Commission's website is now active!!! Visit us at:
www.prestonsburgwater.com**

Our Water

The Prestonsburg City's Utilities Commission Water Treatment Plant can treat up to 5 million gallons of water a day, using the Levisa Fork of the Big Sandy River as its surface water source. The water plant facility uses a conventional treatment process consisting of coagulation, sedimentation, filtration and disinfection, along with corrosion control treatment and fluoridation (for dental protection).



The final source water assessment for this system has been completed and is contained in the Big Sandy Area Development District Water Assessment Plan. A summary of the system's susceptibility to potential sources of contamination is: underground storage tanks, RCRIS hazardous waste handlers, NREPC, Waste Water Treatment Plants and highway bridges. The plan is available for inspection at the Prestonsburg City's Utilities office or at the BSADD office.

The table enclosed within this report shows the results of our monitoring for the period of January 1, 2016 through December 31, 2016.

Fun Facts

1. A water faucet that leaks 60 drops per minute can waste 192 gallons of water per month!
2. One glass of water will stop midnight hunger pains for almost 100% of dieters studied in a University of Washington study!
3. Prestonsburg City's Utilities Commission's Distribution System contains 28 water tanks, 29 pump stations, and over 320 miles of water lines!!!

What is in our source water?

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 or the 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 and human activity.

The following contaminants may be present in source water:

- Microbial contaminants such as viruses and bacteria from sewage, livestock and wildlife
- Inorganic contaminants such as salts and metals. These occur naturally or come from urban storm runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming
- Pesticides and herbicides from agriculture, urban storm water runoff and residential areas
- Organic chemical contaminants including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum, and can also come from gas stations, urban water runoff and septic systems.
- Radioactive contaminants which can occur or result from oil and gas production and 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 that shall provide the same protection for public health.

Drinking water, including bottled water, may be reasonably 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. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791)

Prestonsburg City's Utilities Commission routinely monitors for contaminants in your drinking water according to Federal and State regulations.

Lead Contaminants

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. Prestonsburg City's Utilities Commission 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 the lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can make to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

Total Organic Carbon

TOC has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-product. These by-products include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increase risk of getting cancer.

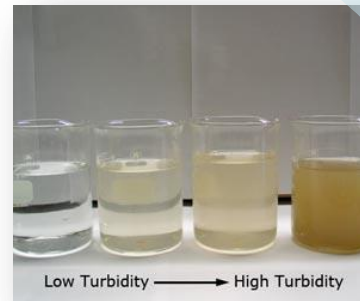
The Drinking Water Branch (DWB) has conducted 4 consecutive quarters of Step 2 total organic carbon jar testing at the Prestonsburg water treatment plant. A review indicates that Prestonsburg be granted a permanent waiver from the TOC compliance calculations dependent upon that monthly TOC and alkalinity samples shall be collected and analyzed each month and that the data shall continue to be submitted to the DWB

Prestonsburg City's Utilities Recognitions

The Prestonsburg City's Utilities Water Treatment Plant and its operators have won numerous state awards over the past years for their outstanding operations. The Prestonsburg City's Utilities Water Treatment Plant won the prestigious **KY/TN AWWA "Excellence in Operations Award"** in 2011 and the **KWOWA Water Treatment Plant of the Year** for outstanding operations for 2009 and was one of the finalist in 2008. The water plant has also been one of the finalists for the **Kentucky Rural Water Association (KRWA) Wooden Bucket Award** in 2006, 2007, and 2012. This award is presented to a drinking water and/or waste water utility that has made substantial and lasting improvements in providing high levels of customer service and high quality drinking water and waste water services in its community.

Turbidity

Turbidity is simply an expression of the physical cloudiness of water caused by the presence of suspended matter such as silt, finely divided organic and inorganic matter and microscopic plants such as algae. The Safe Drinking Water Act stipulates specific monitoring requirements for turbidity. The Prestonsburg City's Utilities Water Plant is required to monitor turbidity measurements continuously and the results reported to the appropriate authorities. Turbidity testing is the most critical tool in recognizing changes in raw water quality, detecting problems in the coagulation and sedimentation, and troubleshooting filtration problems.



Water and Your Health

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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)



Maximum Contaminant Levels (MCL)

MCLs are set at very stringent levels. To understand the possible health effect described for many regulated contaminants, a person would have to drink 2 liters of water every day at MCL level for a lifetime to have one-in-a-million chance of having the described health effect.

Definitions

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions.

Below Detection Level (BDL) – Laboratory analysis indicates that the constituent is not present.

Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water

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

Parts per million (ppm) – One part per million corresponds to one minute in two years or a single penny in \$10,000

Parts per billion (ppb) – One part per billion corresponds to one minute in 2000 years or a single penny in \$10,000,000

Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Maximum Contaminant Level (MCL) – The highest level of contaminant that is allowed in drinking water. MCLs are set as close to 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 of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

PCi/L – Picocuries per liter, a measurement for radioactivity

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT *Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.25	100	No	Soil runoff

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	.03	0.03 to 0.03	April 2016	No	Drilling wastes; metal refineries; erosion of natural deposits
Chromium [1020] (ppb)	100	100	1	1 to 1	April 2016	No	Discharge from Steel and pulp mills, erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.0337 (90 th percentile)	.001 to .0793	July 2015	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	.73	.73 to .73	April 2016	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	0 (90 th percentile)	0 to 5	July 2015	No	Corrosion of household plumbing systems
Nickel (ppm) (US EPA remanded MCL in February 1995)	N/A	N/A	1	1 to 1	April 2016	No	N/A
Nitrate [1040] (ppm)	10	10	0.37	0.37 to 0.37	July 2016	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants/Disinfection Byproducts and Precursors

Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.16 (lowest average)	1.00 to 1.99 (monthly ratio)	N/A	No	Naturally present in environment
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.37 (highest average)	0.51 to 2.45	N/A	No	Water additive to control microbes
HAA (ppb) [Haloacetic acids] [Stage 2 DBP]	60	N/A	43 (locational average)	3 to 47 (range of individual sites)	N/A	No	Byproduct of drinking water disinfectant
TTHM (ppb) [total trihalomethanes] [Stage 2 DBP]	80	N/A	59 (locational average)	22 to 79 (range of individual sites)	N/A	No	Byproduct of drinking water disinfectant



2016 Water Treatment Plant of the Year

The Prestonsburg City's Utilities Commission Water Treatment Plant was awarded the Outstanding Water Treatment Plant of the Year for 2016 from the Kentucky Water Wastewater Operators Association. The plant demonstrated a level of proficient operations in accordance with all required permit standards and had no violation in the year of 2016.

Top Row Left: Charlie Rice, Don Compton, Tim Goble

Bottom Row Left: Woody Jarrell, Larry Josh Slone, Darrell Crider