

West Laurel Water Association
2018 Water Quality Report

Manager: Donta Evans

CCR Contact: Brad Wilson

PWSID: KY0630451

Address: PO Box 726 London, KY 40741

Phone: 606-878-9420

Meetings: Water District Office / 2nd Monday each month at 3:00 PM

Our source of water is surface water from Wood Creek Lake. Wood Creek Water District withdraws water from the lake for processing at their water treatment plant which is then purchased by West Laurel for distribution to our customers. A susceptibility analysis of Wood Creek Lake indicates that the overall likelihood of contamination is moderate. The contaminants of highest concern include pesticide & fertilizer application, fuel & chemical transportation along roadways that transect the Wood Creek watershed and domestic wastewater discharges. The presence of excessive nutrients (nitrogen & phosphate) from fertilizer and wastewater discharge is of particular concern. These chemicals not only degrade water quality, but are a nutrient source for algae. The impact of algal growth on drinking water can range from taste & odor problems to forming harmful algal blooms that produce neurotoxins. The Wood Creek Water District created a Wastewater Division in 2000 to mitigate nutrient loading by installing sanitary sewer lines. In addition to reducing wastewater discharges, the wastewater system provides homeowners an option from conventional septic systems while increasing property value. Wood Creek continually seeks funding to provide wastewater coverage to the entire watershed. Activities and land use within the watershed is monitored for changes that can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. The complete Source Water Assessment Summary for Laurel County is available for inspection at the Cumberland Valley Area Development District office.

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).

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).

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. Your local public water system 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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, (µg/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.

Variances & 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.

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. Copies of this report are available upon request by contacting our office during business hours.

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.

WOOD CREEK WATER DISTRICT							
	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity		
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.09	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	0.011	0.011 to 0.011	Aug-18	No	Drilling wastes; metal refineries; erosion of natural deposits
Cyanide [1024] (ppb)	200	200	20	20 to 20	Aug-18	No	Discharge from steel/metal factories; plastic and fertilizer factories
Fluoride [1025] (ppm)	4	4	0.70	0.7 to 0.7	Aug-18	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.21	0.21 to 0.21	Feb-18	No	Fertilizer runoff; 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	1.08 (lowest average)	1.00 to 1.67 (monthly ratios)	2018	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.							
WEST LAUREL WATER ASSOCIATION							
Inorganic Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.408 (90 th percentile)	0.0126 to 0.477	Sep-18	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	0 (90 th percentile)	0 to 2	Sep-18	No	Corrosion of household plumbing systems
Disinfectant(s) & Disinfection Byproducts							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.37 (highest average)	0.47 to 2.14	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	46 (high site average)	18 to 69 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	49 (high site average)	19 to 67 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Violation: Monitoring & Reporting (2018-7128712)

We received a violation for collecting an insufficient number of chlorine samples during the 1/1/2018 to 1/31/2018 compliance period. All water systems are required to collect daily disinfectant residuals on the distribution system. On 1/1/2018 the sample for chlorine residual was not collected. This was an oversight and after making changes to our sample collection protocol we have not received another violation for this issue. We returned to compliance the following month after completing the required monitoring. There are no health effects associated with this violation.

Violation: Monitoring & Reporting (2019-7128713)

We received a violation for collecting an insufficient number of bacteriological samples during the 9/1/2018 to 9/30/2018 compliance period. Based upon our population served we are required to collect 15 bacteriological samples each month to be analyzed for total coliform bacteria. During September 2018 one sample was not collected. This was an oversight and after making changes to our sample collection protocol we have not received another violation for this issue. We returned to compliance the following month after completing the required monitoring. There are no health effects associated with this violation.

This report will not be mailed unless requested. Please contact our office if you would like a copy.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for West Laurel Water Association PWSID #KY0630451 Violations: 2018-7128712 & 2019-7128713

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing (did) to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 1/1/2018 – 1/31/2018 and 9/1/18 – 9/30/18 we did not complete all monitoring or testing for Chlorine and Total Coliform and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for this contaminant, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were taken
Chlorine	Daily	30	January 2018	February 2018
Total Coliform	15 Samples Monthly	14	September 2018	October 2018

What is being done?

This was an oversight when collecting samples. After making changes to our sample collection protocol we have not received another violation for this issue.

For more information, please contact Brad Wilson at 606-878-9420 or PO Box 726, London, KY 40741.

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.