

East Casey County Water District Water Quality Report 2018

Water System ID: KY0230556 Manager: Andy Greynolds 606-787-9961	CCR Contact: Andy Greynolds 606-787-9961 agreynolds@windstream.net	Mailing Address: P.O. Box 56 Liberty, KY 42539	Meeting location and time: 690 S. Wilkinson Blvd 3rd Tuesday monthly at 7:00 PM
---	--	--	---

Our purchased water comes from five different suppliers that treat surface water, the City of Liberty serves most of the county except southern portion (Liberty Lake), Jamestown serves southern portion and Somerset via Eubank serves the Grove Ridge area (Lake Cumberland), Campbellsville serves the northwest portion and Columbia/Adair Utilities serves a few customers in Clementsville and Pellyton area (Green River Lake). Source Water Assessments have been conducted for each source and the susceptibility is generally low. The greatest concerns include transportation corridors, agricultural activities, urban residential and business activities, and waste generators. The complete Source Water Assessment Plans listing specific contaminant sources are available for review at the respective water producer offices or at the Lake Cumberland Area Development office in Russell Springs, KY.

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).

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 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.

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.

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.

To request a paper copy call 606-787-9961.

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.

Regulated Contaminant Test Results East Casey County Water District							
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.22 (90 th percentile)	0 to 0.25	Jul-17	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	2 (90 th percentile)	0 to 9	Jul-17	No	Corrosion of household plumbing systems
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.86 (highest average)	0.4 to 1.25	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	44 (high site average)	19 to 57 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	43 (high site average)	17.1 to 68 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Your drinking water has been sampled for a series of unregulated contaminants. None of the contaminants were detected. Unregulated contaminants are those that 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.

	Allowable Levels	Source	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% monthly samples	L= J= S=	0.09 0.03 0.064	100	No	Soil runoff

Regulated Contaminant Test Results - Liberty (L) Jamestown (J) Somerset (S)

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Alpha emitters [4000] (pCi/L)	15	0	L=	-0.036	-0.036 to -0.036	2014	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	L=	0.68	0.68 to 0.68	2014	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	L= J= S=	0.02 0.026 0.02	0.02 to 0.02 0.026 to 0.026 0.02 to 0.02	2018	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	L= J= S=	0.9 0.82 0.8	0.9 to 0.9 0.82 to 0.82 0.8 to 0.8	2018	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	L= J= S=	0.3 0.25 0.3	0.3 to 0.3 0.25 to 0.25 0.3 to 0.3	2018	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	L= J= S=	3.62 1.33 1.2	2.24 to 5.5 0.71 to 1.83 1 to 1.69	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.

	Allowable Levels	Source	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% monthly samples	C	0.28	100	No	Soil runoff

Regulated Contaminant Test Results - Campbellsville (C) No water purchased from Columbia-Adair during 2018

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	C	0.02	0.02 to 0.02	2018	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	C	0.8	0.8 to 0.8	2018	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	C	0.6	0.6 to 0.6	2018	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	C	1.2	1.07 to 1.69	2018	No	Naturally present in environment.

Violations: 2018-9950844 (MOR) & 2018-9950845 (chlorine) May 2018 - 2018-9950846 (MOR) July 2018

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 May 2018, we did not complete all monitoring by failing to report or correctly report testing for chlorine. Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

Each month we are required to complete a Monthly Operation Report (MOR) and submit it to the Kentucky Division of Water by the tenth of the following month. This report includes daily testing result. Our MORs for May 2018 and July 2018 did not arrive at Division of Water by the required deadline.

We received an additional violation because the distribution system chlorine summary page contained within the May MOR was not received by the required deadline. There is nothing you need to do. The MORs and chlorine results were received by Division of Water but arrived late.

Violation 2019-9950847 (TTHM monitoring)

Our water system failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

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 10/1/2018 – 12/31/2018, we did not complete all monitoring or testing for trihalomethanes (TTHM), and therefore cannot be sure of the quality of your drinking water during that time.

Any sample we collect must be sent to and analyzed by a certified laboratory within a specified amount of time. We collected the sample on 11/14/2018 and it was received by our contract lab. The lab performed the analysis and the test results were good, however, the laboratory did not do the analysis within the allowed holding time. The test results were rejected by the Division of Water. Since that sample is required to be collected during a specific week we were not allowed to collect a replacement sample and therefore received a monitoring violation.

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

For more information, please contact Andy Greynolds at 606-787-9961 or P.O. Box 56 Liberty, KY 42539.

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.