

East Casey County Water District Water Quality Report 2020

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
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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.

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 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.**

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
Barium [1010] (ppm)	2	2	L J S	0.02 0.023 0.01	0.02 to 0.02 0.023 to 0.023 0.01 to 0.01	2020	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	L J S	0.73 0.8 0.66	0.73 to 0.73 0.8 to 0.8 0.66 to 0.66	2020	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	L J S	0.4 0.63 0.4	0.4 to 0.4 0.63 to 0.63 0.4 to 0.4	2020	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	3.45 2.27 1.11	2.33 to 5.53 1.08 to 4.17 1 to 1.71	2020	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.

Other Constituents

Turbidity (NTU) TT * Representative samples	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples	L J S	0.06 0.04 0.04	100	No	Soil runoff

Regulated Contaminant Test Results Campbellsville Water and Sewer System

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	0.02	0.02 to 0.02	Jan-20	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.71	0.71 to 0.71	Jan-20	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.7	0.7 to 0.7	Jan-20	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.22 (lowest average)	1.05 to 1.55 (monthly ratios)	2020	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.

Other Constituents

Turbidity (NTU) TT * Representative samples	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.304	99	No	Soil runoff

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
Manganese	5.367	1 to 11	Aug-19
HAA5	34.438	23 to 49	Oct-19
HAA6Br	3.219	1.9 to 4.3	Oct-19
HAA9	38.000	26 to 53	Oct-19

Your drinking water has been sampled for a series of unregulated contaminants. 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.

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
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.86 (highest average)	0.11 to 1.61	2020	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	54 (high site average)	0 to 55 (range of individual sites)	2020	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	63 (high site average)	21.4 to 103.1 (range of individual sites)	2020	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.32 (90 th percentile)	0 to 0.5	Aug-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	0 (90 th percentile)	0 to 6	Aug-20	No	Corrosion of household plumbing systems

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
Manganese	2.436	0 to 6.6	Jun-20
HAA5	31.625	0 to 51	Jun-20
HAA6Br	2.469	0 to 4.2	Jun-20
HAA9	34.063	0 to 55	Jun-20

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Violation

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 the fourth quarter of 2020, we did not complete all monitoring or testing for total trihalomethanes (TTHM), and therefore cannot be sure of the quality of your drinking water during that time.

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.

Our Stage 2 Disinfection Byproducts samples, which includes haloacetic acids and total trihalomethanes, are collected from four specific sites in our distribution system during specific time periods. We also collect additional samples from entry points from our suppliers. All of the routine samples were collected for the fourth quarter at the scheduled time. There was a problem with our TTHM samples and they could not be analyzed by our contract laboratory. A lab technician traveled to our system to assist with collection of replacement samples. However, samples were collected from our entry point sites instead of the specified monitoring sites. By the time this error was discovered it was beyond the specified time period for collecting another set of samples. This resulted in a monitoring violation. We have discussed this with our contract lab and hopefully if a similar situation occurs in the future the samples will be collected from the correct locations within the specified time periods.

For more information, please contact Andy Greynolds at 606-787-9961 or PO 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.