

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.

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.



Water Quality Report 2018



Water System ID: KY0740276
Manager: Stephen Whitaker
606-376-2540
CCR Contact: Stephen Whitaker

Mailing address:
P.O. Box 488
Whitley City, KY 42653

Meeting location and time:
456 N Hwy 27 – Whitley City
Last Tuesday each month at 9:00 AM

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

McCreary County Water District operates two water treatment plants (plant A – Revelo and plant B – Flatrock). The sources of raw water for McCreary County Water District are Lake Cumberland and Laurel Creek Reservoir. An analysis of the overall susceptibility to contamination of the McCreary County Water District water supply indicated that this susceptibility is generally low. Areas of concern include forest and woodland cover, one major roadway and power lines with potential herbicide usage. Within the critical protection area of the Laurel Creek intake there are eighteen potential sources of contamination that are ranked high, thirteen ranked medium and none ranked as low. Areas of concern include a railroad, row crops, underground storage tanks; KPDES permitted discharges, mining, and waste generators or transporters. The location of the Lake Cumberland water intake and remote area of the watershed make the routine non-point contaminate sources of low concern. The Laurel Creek Reservoir intake is more susceptible to short-term hazards due to numerous contaminant sources located in the critical protection area. However, water system impact is limited due to the secondary withdrawal nature of this location. This is a summary of the system's susceptibility to contamination, which is a part of the completed Source Water Assessment Plan (SWAP). The completed plan is available for inspection at the Water District Office located in Whitley City.

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>.

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.

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT	No more than 1 NTU*	A=	0.14	100	No	Soil runoff
* Representative samples of filtered water	Less than 0.3 NTU in 95% monthly samples	B=	0.17	100		

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	A=	0.02	0.02 to 0.02	Mar-18	No	Drilling wastes; metal refineries; erosion of natural deposits
			B=	0.02	0.02 to 0.02	Jun-18		
Copper [1022] (ppm) sites exceeding action level 0	AL= 1.3	1.3		0.140 (90 th percentile)	0 to 0.26	Jun-16	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	A=	0.72	0.72 to 0.72	Mar-18	No	Water additive which promotes strong teeth
			B=	0.7	0.7 to 0.7	Jun-18		
Lead [1030] (ppb) sites exceeding action level 0	AL= 15	0		0 (90 th percentile)	0 to 3	Jun-16	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	B=	0.1	0.1 to 0.1	Mar-18	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	A=	1.36	1.28 to 1.82	2018	No	Naturally present in environment.
			B=	1.3	0.91 to 1.5			

*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

Chlorine (ppm)	MRDL = 4	MRDLG = 4		2.00 (highest average)	1.20 to 2.72	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A		36 (average)	6 to 59 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A		34 (average)	8 to 56 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Other Contaminants

Cryptosporidium [oocysts/L]	0 (99% removal)	TT	A=	0	3	2018	See note below	Human and animal fecal waste
			B=	1 (positive samples)	3 (no. of samples)			

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 1 sample of 6 collected from the raw water source for our water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

	Average	Range of Detection		
Fluoride (added for dental health)	0.70	0.5	to	0.9
Sodium (EPA guidance level = 20 mg/L)	7.00	7	to	7

Unregulated Contaminants (UCMR 4)		average	range (ppb)		date
Manganese	A	0.333	0	to 1	Nov-18
Manganese	B	0.147	0	to 0.44	Aug-18
HAA5		36.5	23	to 54	Nov-18
HAA6Br		9.025	6.9	to 12	Nov-18
HAA9		45.25	30	to 65	Nov-18

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.

TTHM Monitoring Violation – 2019-9626922

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 Stephen Whitaker at 606-376-2540 or P.O. Box 488, Whitley City, KY 42653.

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.

