

McCreary County Water District

Your Water,
Our Commitment



"The mission of McCreary County Water District is to provide safe and clean drinking water, in compliance with all state and federal regulations, while also serving McCreary County residents by protecting our source water, continuing to improve our technology and treatment methods, engaging in community events, providing educational assistance opportunities, and offering excellence in customer service."

Water Quality Report for 2016

www.mccrearywater.com Billing Information: (606) 376-2540

Water System ID: KY0740276 Manager: Stephen T. Owens CCR Contact: Stephen Whitaker Phone: 606-376-2540

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Meeting Location and Time: Water District Office – U.S. 27, Whitley City. Meetings held last Tuesday each month at 9:00 A.M.

This report is to inform you about the excellent water & services that we deliver each day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water remains at the highest level as we meet the needs of our community. A vulnerability assessment has been conducted and we are continuing to take every effort to maintain a high level of security for our facilities and distribution system. McCreary County Water District routinely monitors for contaminants in your drinking water according to Federal and State regulations. The table enclosed within this report shows the results of our monitoring for the period of Jan. 1 through Dec. 31, 2016.

The surface water source of your drinking water is the Laurel Creek Reservoir and Lake Cumberland near Big Creek. The area around the lake is mostly residential but also contains some agricultural, recreational, and light industry activities. The following 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 on U.S. 27, in Whitley City. The sources of raw water for McCreary County Water District are Lake Cumberland water intake and Laurel Creek Reservoir in McCreary County. An analysis of the overall susceptibility to contamination of the McCreary County Water District water supply indicated that this susceptibility is generally low. Within the critical protection area of the Lake Cumberland intake there are three potential sources of contamination that are ranked high, four ranked medium, and none ranked 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. Area of concern includes 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 too short-term hazards due to numerous contaminate sources located in the critical protection area. However water system impact is limited due to the secondary withdrawal nature of this location.

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.

Improvements in 2016 & 2017

1. Water Treatment Plant "A" (Phase I & II) demolition of existing clearwell, new clearwell & clearwell vault, carbon feed system.
2. Rattlesnake Ridge Pump Station Renovation.
3. Corp of Engineers 531 Wastewater Project.

Proposed Improvements

1. Continue to meet compliance with the upcoming EPA Stage II disinfectants & disinfection byproducts rule.
2. Stearns to Smithtown water line replacements.
3. Marshes Siding area water tank and booster pump station.
4. Pine Knot area water tank.



Pine Knot 4th graders visit one of our treatment plants

[KY. Energy and Environmental Cabinet recognized McCreary County Water District for meeting the Area-Wide Optimization Program goals for both settled and filtered water in 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016.](#)

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>.

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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

	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	A= B=	0.264 0.105	100	No	Soil runoff	
Regulated Contaminant Test Results							
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	B= 1.62	0 to 3.24	2013	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	B= 0.46	0.46 to 0.46	2013	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	A= 0.02 B= 0.02	0.02 to 0.02 0.02 to 0.02	2016	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.140 (90 th percentile)	0 to 0.26	2016	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	A= 0.7 B= 0.7	0.7 to 0.7 0.7 to 0.7	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 3	2016	No	Corrosion of household plumbing systems
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A= 1.38 B= 1.37	1 to 1.76 0.96 to 1.99	2016	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.							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	2.14 (highest average)	0.76 to 2.69	2016	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	41 (average)	6 to 59 (range of individual sites)	2016	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	39 (average)	7 to 62 (range of individual sites)	2016	No	Byproduct of drinking water disinfection.
Cryptosporidium [oocysts/L]	0 (99% removal)	TT	A= 1 B= 2 (positive samples)	9 9 (no. of samples)	2016	See note below	Human and animal fecal waste

Fluoride (added for dental health)	Average	Range of Detection
Plant A	0.80	0.5 to 0.9
Plant B	0.70	0.6 to 1

Cryptosporidium. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water. Three of the eighteen raw water samples tested during the past year indicated the presence of Cryptosporidium.

Our water system violated drinking water requirements over the past year by failing to timely report our LT2 (Cryptosporidium) Sampling Plan to the Kentucky Division of Water (KDOW). Even though this is not an emergency, as our customers, you have a right to know what happened and what we did to correct this 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 7/2/2016 – 8/15/2016 compliance period, we did not complete all monitoring requirements by failing to correctly report our LT2 Sampling Plan on time. Therefore, a violation was issued because the KDOW could not verify our plan to adequately check the quality of your drinking water, before the sampling time. The LT2 Sampling Plan has since been submitted to KDOW, and it has been determined that the plan to check the water quality met all federal requirements for monitoring Cryptosporidium over the next two years.

There is nothing you need to do at this time. There are no potential adverse health effects related to the reporting violation, no population is at risk, and there is no need to use alternative water supplies. After becoming aware of the omission, we submitted our monitoring plan. No further actions are required at this time. For more information, please contact Stephen T. Owens 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.

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.

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.

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