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."

PWSID # KY0740276 www.mccrearywater.com

Billing Information: (606) 376-2540

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.

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.

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, 2015.

The Division of Water had instructed that special language be included in the CCR when the "average" arsenic level exceeded half the MCL. However, federal regulations indicate that the special language is to be included when "any" sample result exceeds half the MCL. During 2014 one of our arsenic samples was slightly over half the MCL and we received a violation because our CCR for 2014 did not include the following special language:

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

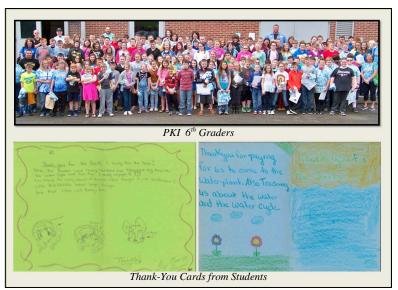
Improvements in 2015 & 2016

- Water Treatment Plant #1 Demolition of Existing Clearwell, New Clearwell & Clearwell Vault, Carbon Feed System
- 2. Marshes Siding Booster Pump Station.
- 3. Rattlesnake Ridge Pump Station Renovation.
- 4. Corp of Engineers 531 Wastewater Project.

Proposed Improvements

- 1. Continue to meet compliance with the upcoming EPA Stage II Disinfectants & Disinfection Byproducts Rule.
- 2. Pine Knot Area & Marshes Siding Area Water Storage Tanks.

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 and 2015.



Pine Knot 4th & 6th graders visit one of our treatment plants

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.

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 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.

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. McCreary County Water District operates two water treatment plants, A & B.

Lowest Violation Allowable **Highest Single** Levels Likely Source of Turbidity Measurement Monthly % Turbidity (NTU) TT No more than 1 NTU A= 0.247 100 * Representative samples Less than 0.3 NTU in B= 0.101 100 No Soil runoff 95% monthly samples of filtered water **Regulated Contaminant Test Results** Contaminant Report Range Date of Violation Likely Source of [code] (units) MCL **MCLG** Level of Detection Sample Contamination Alpha emitters 15 0 [4000] (pCi/L) No Erosion of natural deposits B= 3.2 2013 0 1.6 to Combined radium 5 0 Erosion of natural deposits (pCi/L) B=0.46 0.46 0.46 2013 No to Barium Drilling wastes; metal refineries; erosion of natural [1010] (ppm) 2 2 B= 0.02 0.02 2015 to deposits AL = Copper [1022] (ppm) 0.236 Corrosion of household (90th 1.3 1.3 0 0.58 2013 No sites exceeding action lev to plumbing systems percentile Cvanide Discharge from steel/metal factories; plastic and fertilizer [1024] (ppb) 200 200 2015 No B= 11 11 to 11 factories Fluoride 0.9 A= 0.9 to 0.9 Water additive which [1025] (ppm) B= 2015 No to promotes strong teeth Lead [1030] (ppb) AL = 3 Corrosion of household $(90^{th}$ sites exceeding action lev 15 0 0 to 14 2013 No plumbing systems percentile Nitrate 0.11 0 0.11 Fertilizer runoff; leaching A= to No from septic tanks, sewage; [1040] (ppm) 10 10 0.12 0 0.12 2015 to erosion of natural deposits Total Organic Carbon (ppm) A= 1.32 1.34 1.82 to Naturally present in (report level=lowest avg. N/A B= 1.21 1 1.75 2015 No to environment. range of monthly ratios) *Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance. Chlorine MRDL MRDLG 2.19 Water additive used to control (ppm) =4=4(highest 1.27 to 3.30 2015 No microbes. average) HAA (ppb) (Stage 2) Byproduct of drinking water 2015 No [Haloacetic acids] 60 N/A 45 8 88 disinfection (average) (range of individual sites) TTHM (ppb) (Stage 2) Byproduct of drinking water 2015 No [total trihalomethanes] 80 N/A 40 8 58 to disinfection. (range of individual sites) (average) Average Range of Detection Plant A Fluoride (added for dental health) 0.90 0.6 1.1 Plant B 0.90 0.7to

MCLs are set at very stringent levels. 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.

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 tor a margin or sat 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 ant 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. 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 contamin

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present. Not Applicable (N/A) - does not apply.

Parts per million (pph) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (pph) - 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.

Picocuries per liter (µCi/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 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 which a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

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 EPA Safe Drinking Water Hotline (800) 426-4791.

For questions about our water system or this report contact Stephen T. Owens or Stephen Whitaker at (606) 376-2540 or P.O. Box 488 Whitley City, KY 42653. You are also invited to attend the regular board meetings held the last Tuesday of every month at 9:00 A.M. at the Water District Office located on U.S. 27, Whitley City.

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