Water - Essential for Life

Caveland Enviromental Authority / Park Water Quality Report for year 2007

KY-0500344

Caveland Enviromental Autoority P.O. Box 426 , Cave City, Ky. 42127
Meeting location: CEA office, 508 S. Dixie Hwy. Cave City Ky.
Meeting Dates and Time: 3rd Thursday of each month 5:30 PM

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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 our customers with 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. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

Our water is purchased from Glasgow Water Company. They utilize surface water from Barren River Reservior and Beaver Creek. Barren River Lake: An analysis of the overall susceptibility to contamination of the Barren River Lake water supply indicated that his susceptibility is generally moderate. Sources of high potential impact include: underground storage tanks, agriculture land use, oil and gas wells, and septic systems. This source assessment for Barren River Lake is available through Barren River Area Development District P.O. 90005 Bowling Green, Ky., 42192, (270) 781-2381 or through David Goodrum (270) 664-2042. Beaver Creek: An Analysis of the overall susceptibility to contamination of the Beaver Creek water supply indicated that this susceptibility is generally moderate. Sources of high potential impact include: two bridges located near the intake, underground storage tanks, agricultural land use, active oil and gas wells, and septic systems. This source assessment for Beaver Creek is available through Barren River Area Development District P.O. Box 90005 Bowling Green, Ky., 42102, (270) 781-2381 or through David Goodrum (270) 664-2042

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).

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.

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 that a water system shall follow.

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

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.

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

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. Unless otherwise noted, the report level is the highest level detected.

A=Caveland Enviromental Authority/Park City pwsid KY0050344 **B=Glascow Water Co. pwsid KY 0050929**

	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	B=	0.233	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
Microbiological Contaminants										
Total Coliform Bacteria # or % positive samples	1	0	B=		0	N/A	0	Feb-07	yes	Naturally present in the environment
Fecal coliform & E.coli % positive samples	0%	0	B=	1	0	N/A	1	Feb-07	yes	Human and animal fecal waste
Radioactive Contaminants										
Alpha emitters [4000] (pCi/L)	15	0	B=	0.8	0.2	to	1.9	Mar-02	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	B=	0.8	0.4	to	1.4	Mar-02	NO	Erosion of natural deposits
Inorganic Contaminants										
Barium [1010] (ppm)	2	2	B=	0.03	0.028	to	0.028	Mar-07	NO	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	B=	0.95	0.71	to	1.52	Sep-07	NO	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	B=	2.71	2.71	to	2.71	Mar-07	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors										
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	B=	1.52	1	to	2.48	N/A	NO	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.										
Chlorine (ppm)	MRDL = 4	MRDLG = 4	A=	0.89 (highest average)	0.5	to	1.21	N/A	No	Water additive used to control microbes.

EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if found.

Maximum Contaminant Levels (MCL's) 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.

Our water system or our supplier Glascow Water Co. violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

In 2007 the Caveland Enviromental Authority was found to be in violation of the Consumer Confidence Rule for failing to provide the state of Kentucky a Certification letter following the distribution of the annual CCR. We will be more vigulant in the future to ensure that this report is provided to the state in a timely manor.

We or our supplier Glascow Water Co. 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 2007compliance period the Glascow Water Co. did not monitor or test or did not complete all monitoring or testing for Dioxin, coloform, fecal coloform, contaminant(s) and therefore cannot be sure of the quality of our drinking water during that time.

In 2007 the Glascow Water Co.was found to be in violation of the Consumer Confidence Rule for improperly generating there 2006 CCR. This error has been addressed in this years 2007 CCR.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.
The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for [this contaminant/these contaminants] and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

contaminant	required sampling frequency	number of samples taken	samples should have been	when samples were or will be taken
Dioxin	bi-annual	0	2	1st/2nd qutr 2008
coloform	monthly	3	5	immediately
fecal coloform	in event	1	1	immediately

Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

What happened? Who is at risk? What is being done?

The excedences and violations in this report are based on the testing and monitoring of the Glascow Water Co. With the Exception of the Park City violation for CCR Certification letter. With better comunication and monitoring the Glascow Water Co. should not have these violations again. Repete sampling for all violations has been addresses and preformed and there are no public health effects at this time. There is nothing that you need to do.

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.