Black Mountain Utility District - Coxton
Water Quality Report for year 2014

KY0480265

Water - Essential for Life

609 Fourmile Road
Baxter, Ky 40806

Meetings: Black Mountain Utility District Office
Meeting Dates and Time: Fourth Tuesday of Month 4:00 PM

Manager: **Ray Metcalfe**
Phone: **606-573-1277**

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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.

The Black Mountain Utility District purchases water for our customers in Coxton from Harlan Muncipal Water Works. Harlan's water treatment plant withdraws surface water from the Poor Fork of the Cumberland River. A Source Water Assessment Plan indicates that the source water is susceptible to contamination from bacteria, metals, and sediment. Land use within the Poor Fork watershed is composed mostly of residential, mining, and logging activities. The assessment shows that the susceptibility to contamination is moderate. Activities and land within the watershed can pose potential risks to your drinking water. Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to our customers because they potentially affect your health and the cost of treating your water. The complete source water assessment can be reviewed at Harlan Municipal Water Works office located at 203 River St. Harlan, KY 40831.

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.

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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.

Harlan Water Works

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.26	100	No	Soil runoff

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Alpha emitters [4000] (pCi/L)	15	0	0.5	0.5 to 1.2	2010	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.1	0.1 to 0.1	2010	No	Erosion of natural deposits
Uranium (µg/L)	30	0	1	1 to 1	2010	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.56	0.56 to 0.56	2014	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.7	0.7 to 0.7	2014	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.3	0.3 to 0.3	2014	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.21 (lowest average)	1.00 to 3.24 (monthly ratios)	2014	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.

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Inorganic Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.060 (90th percentile)	0.045 to 0.064	Sep-12	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	3 (90th percentile)	0 to 3.6	Sep-12	No	Corrosion of household plumbing systems
Disinfectants/Disinfection Byproducts and Precursors							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	0.86 (highest average)	0.66 to 1.03	2014	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids] (Annual Sample)	60	N/A	88 (high site)	87 to 88 (range of individual sites)	2014	No*	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes] (Annual Sample)	80	N/A	35 (high site)	33 to 35 (range of individual sites)	2014	No	Byproduct of drinking water disinfection.

Annual Stage 2 sample triggered quarterly sampling. No violation if only the annual sample exceeded the MCL.

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.

Unregulated Contaminants (UCMR 3)	Average	Range (ppb)			Date
vanadium	0.068	BDL	to	0.34	2013
strontium	483.5	275	to	800	2013
chromium-6	0.11	0.08	to	0.15	2013

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

PUBLIC NOTICE from HARLAN WATER WORKS

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants 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.

Violation: Public Notification Rule

We were issued a violation on 10/9/2014 for failing to submit a Public Notification Certification for Public Notice performed for violation 2014-9610409, Asbestos. The violation was printed in the 2013 CCR; however we did not submit the certification to Division of Water. Since receiving this violation we have submitted the certification. There are no health effects associated with this violation.

PUBLIC NOTIFICATION

Our water system 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.

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 10/01/2014 - 12/31/2014 we did not monitor or test for Haloacetic Acids (HAA) & Total Trihalomethane (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 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 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	When samples should have been taken	When samples were or will be taken
HAA	Quarterly if the annual sample exceeds the MCL	0	2nd week November 2014	February 28, 2015
TTHM		0		

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

We were issued a violation on 2/4/2015 for failing to collect HAA and TTHM samples during the fourth quarter 2014. We were required to sample for TTHM and HAA annually during the 3rd week of August. We completed that monitoring; however the MCL for TTHM was exceeded. When the MCL is exceeded for an annual sample under the Stage 2 Disinfection By-Products Rule the water system must initiate increased monitoring. We were unaware of that rule and did not begin monitoring during the fourth quarter 2014. We have since contacted our laboratory and samples are being collected quarterly. The most recent samples collected were under the MCL.

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.