

# Peaks Mill Water District

## 2012 Annual Water Quality Report

### PWSID # KY0370346

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the quality of our water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make continually to improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water remains at the highest level and the lowest price as we meet the needs of our community.

Our water supply comes from the City of Frankfort, which is treated surface water from the Kentucky River.

The Peaks Mill Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. The table enclosed within shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2012.

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 can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include: 1) Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. 2) Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. 4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. 5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

If you have any questions about this report or concerning your water utility, please contact Dale S. Gatewood at (502) 227-5740. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are normally held on the first Monday of each month at 7:30 p.m. at the Peaks Mill Water District Office located at 7165 US 127 North in Frankfort, Kentucky.

In the test results table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system shall follow.

**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.

**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.

*Parts per billion (ppb)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

*Picocuries per liter (pCi/L)* - a measure of the radioactivity in water.

*Not applicable (N/A)* - does not apply.

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

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 (KY Division of Water) 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. Most of reporting data comes from Frankfort Water Plant (PWSID # KY0370143). The only sampling done by Peaks Mill Water District (PWSID # KY0370346) is for Asbestos, Copper, and Lead.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation Yes/No	Likely Source
Turbidity (NTU) TT	Never more than 1 NTU Less than 0.3 NTU 95% of samples each month.	.29	100%	N	Soil runoff

### REGULATED CONTAMINANT TEST RESULTS

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation Yes/No	Likely Source of Contamination
<b>Radioactive Contaminants</b>							
Alpha emitters [4000] (pCi/l)	15	0	1.8	N/A	10/5/09	N	Erosion of natural deposits
Combined radium (pCi/l) (measured as RA-228)	5	0	0.4	N/A	10/5/09	N	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Asbestos (MFL)	7	7	<0.102	N/A	12/6/12	N	Decay of asbestos cement water mains; erosion of natural deposits
Barium [1010] (ppm)	2	2	.021	N/A	2/21/12	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper [1022] (ppm) (0 sites exceeded the AL)	AL=1.3	1.3	0.230 (90 <sup>th</sup> percentile)	0.010 - 0.310	8/17/12	N	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	1.09	0.62 - 1.09	9/10/12	N	Water additive which promotes strong teeth
Lead [1030] (ppb) (0 sites exceeded the AL)	AL=15	0	0.014 (90 <sup>th</sup> percentile)	0.002 - 0.015	8/16/12	N	Corrosion of household plumbing systems
Nitrate (as Nitrogen) [1040] (ppm)	10	10	0.7	0.2-0.7	2012	N	Runoff from fertilizer use; 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	1.342(low est ann avg)	1.00-2.67	2012	N	Discharge from chemical plants and other industrial activities
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be at least 1.00 to meet the TT.							
Chloramines (ppm)	MRDL = 4	MRDLG = 4	2.5annual average	1.1 – 3.3	2012	N	Water additive used to control microbes
Haloacetic acids or HAA5 (ppb)	60	N/A	34 (annual average)	14 - 45	2012	N	Byproduct of drinking water disinfection
TTHM [total trihalomethanes] (ppb)	80	N/A	51 (annual average)	17 - 60	2012	N	By-product of drinking water chlorination
UCMR 2			average	range (ppb)	date		
N-nitroso-dimethylamine (NDMA)		N/A	.0028 ppb (highest level detected)	.0028	8/9/10	N	<i>EPA has not established drinking water standards for unregulated contaminants. There are no MCL's and therefore no violations if found.</i>

**Special Precautions: 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).**

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 at **1-800-426-4791**.

**Maximum Contaminant levels (MCL):**  
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 describe health effect.

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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