# Peaks Mill Water District
# 2014 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, 2014 to December 31, 2014.

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 storm water 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 storm water 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 storm water 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 system. Food and Drug Administration regulations establish limits for contaminants in bottled water which much provide the same protection for public health.

If you have any questions about this report or concerning your water utility, please contact Dale 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 contaminant that is allowed in drinking water. ML's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** – the highest level of a disinfectant allowed in drinking water. There is a 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 I $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.

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

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

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

The data presented in this report is 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, is more than one year old. Unless otherwise noted, the report level is the highest level detected. Most of reported data comes from the Frankfort Water Plant (PSWID #KY0370143). The only sampling done by Peaks Mill Water District (PWSID # KY 0370346) is for Asbestos, Copper, and Lead.

| | Allowable Levels | Highest Single Measurement | Lowest Monthly % | Violation Y/N | Likely Source |
|---|---|---|---|---|---|
| Turbidity (NTU) TT | No more than 1 NTU<br>Less than 0.3 NTU in 95% of samples each month | 0.21 | 100% | N | Soil runoff |

| **REGUATED CONTAMINANT TEST RESULTS** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Contaminant [code] (units)** | **MCL** | **MCLG** | **Report Level** | **Range of Detection** | **Date of Sample** | **Violation** | **Likely Source of Contamination** |
| **Radioactive Contaminants** | | | | | | | |
| Arsenic (ppm) | 10 | 0 | 0.002 | N/A | 2/20/2014 | No | Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes |
| Combine radium (pCi/L) [measured as RA-228] | 5 | 0 | 1 | N/A | 11/12/2014 | No | Erosion of natural deposits |
| **Inorganic Contaminants** | | | | | | | |
| Asbestos (MFL) | 7 | 7 | <0.102 | - | 12/6/12 | N | Decay of asbestos cement water mains, erosion of natural deposits |
| Barium [1010] (ppm) | 2 | 2 | 0.018 | N/A | 2/20/14 | N | Drilling wastes; metal refineries; erosion of natural deposits |
| Copper [1022] (ppm) {0 sites exceeded the AL} | AL = 1.3 | 1.3 | 0.230 (90th percentile) | 0.010 to 0.310 | 8/17/12 | N | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Fluoride [1025] (ppm) | 4 | 4 | 0.93 | .78 - .93 | 2/4/14 | N | Erosion of natural deposit; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories |
| Lead [1030] (ppb) {0 sites exceeded the AL} | AL=15 | 0 | 4 (90th percentile) | 2 to 15 | 8/16/12 | N | Corrosion of household plumbing systems, erosion of natural deposits |
| Mercury [1035] (ppm) | 2 | 2 | 0.0005 | N/A | 2013 | N | Erosion of natural deposits, refineries and factories; landfills, run off from cropland |
| Nitrate (as Nitrogen) [1040] (ppm) | 10 | 10 | 0.90 | 0.1 - 0.9 | 2/20/14 | 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 | 1.25 (lowest average) | 1.25 - 1.48 | 2014 | 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 1.00 or greater for compliance. | | | | | | | |
| Chloramines (ppm) | MRDL = 4 | MRDLG = 4 | 2.4 (highest average) | 1.0 - 3.3 | 2014 | N | Water additive used to control microbes |
| Haloacetic acids or HHA (ppb) | 60 | N/A | 19.5 (system average) | 11 - 28 | 2014 | N | Byproduct of drinking water disinfection |
| TTHM [total trihalomethances] (ppb) | 80 | N/A | 31.8875 (system average) | 12.7 - 64.1 | 2014 | N | Byproduct of drinking water disinfection |

Please note: Lead in the 2013 CCR was not reported in parts per billion (ppb).

**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 indicated that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at **800-426-4791.**

Maximum Contaminant Levels (MCL): MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminates, 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.

**Spanish (Espanol)** Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

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 tape 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 Frankfort Plant Board Water Treatment Facility at 200 Coffeetree Road, Frankfort, KY, withdraws surface water from pool #4 on the Kentucky River. The final source water assessment has been completed and is available in the Franklin County Water Supply Plan. The plan is available for inspection at the Frankfort Plant Board Water Treatment Plant. An analysis of the susceptibility of our water supply to contamination indicates that this susceptibility is generally moderate. There are, however, a few areas of high concern. Several highway bridges and major roads occur in the immediate vicinity of the intake. An accidental release of toxic materials from a nearby bridge or road could pose an immediate threat to Frankfort's intake. Other areas of concern that occur in the immediate vicinity of the intake include land used for agricultural purposes, firms that use Tier II hazardous chemicals, a Superfund site, a hazardous waste generator and/or transporter, sewer lines and a KPDES permitted discharger.

This report is being published in the State Journal and will not be mailed to customers unless requested. If you would like a copy of this report please contact our business office at 227-5720.