Farmdale Water District
Water Quality Report 2019

Water System ID: KY0370128 Manager: Brian Armstrong 502-223-3562	CCR Contact: Brian Armstrong 502-223-3562 farmdalewater@gmail.com	Mailing Address: 100 Highwood Drive Frankfort, KY 40601	Meeting location and time: 100 Highwood Drive First Friday at 9:00 AM

Frankfort Plant Board Water Treatment Plant treats surface water from pool #4 on the Kentucky River. Farmdale Water District purchases water from Frankfort. An analysis of the susceptibility of the water supply to contamination indicates that this susceptibility is generally moderate. 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. Within the greater watershed area, there are numerous permitted operations and activities and other potential contaminant sources of moderate concern that cumulatively increase the potential for the release of contaminants within the area. These potential contaminant sources include everything from underground storage tanks, to power line rights-of-way that may be treated with herbicides, to active and inactive landfills. The Source Water Assessment Plan is available for inspection at the Frankfort Plant Board Water Treatment Plant.

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).

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.

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.

Regulated Contaminant Test Results			Frankfort Plant Board			
Contaminant [code] (units)	**MCL**	**MCLG**	**Report Level**	**Range of Detection**	**Date of Sample**	**Violation**	**Likely Source of Contamination**
Combined radium (pCi/L)	5	0	2.66	2.66 to 2.66	Oct-17	No	Erosion of natural deposits
Barium [1010] (ppm)	2	2	0.018	0.018 to 0.018	Feb-19	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.3	0.3 to 0.3	Feb-19	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	1	0.22 to 1	Nov-19	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.71 (lowest average)	1.24 to 3.56 (monthly ratios)	2019	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.

Other Constituents					
Turbidity (NTU) TT * Representative samples	**Allowable Levels**	**Highest Single Measurement**	**Lowest Monthly %**	**Violation**	**Likely Source of Turbidity**
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.26	100	No	Soil runoff

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
Manganese	0.766	0.766 to 0.766	2019
HAA5	32.1	26.09 to 40.87	2019
HAA6Br	8.06	6.26 to 11.9	2019
HAA9	39.6	32.9 to 51.9	2019

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they 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.

Regulated Contaminant Test Results			Farmdale Water District				
Contaminant [code] (units)	**MCL**	**MCLG**	**Report Level**	**Range of Detection**	**Date of Sample**	**Violation**	**Likely Source of Contamination**
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.36 (90^{th} percentile)	0 to 0.67	Aug-17	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	3 (90^{th} percentile)	0 to 10	Aug-17	No	Corrosion of household plumbing systems
Disinfectants/Disinfection Byproducts and Precursors							
Chloramines (ppm)	MRDL = 4	MRDLG = 4	1.89 (highest average)	0.6 to 3.8	2019	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	32 (high site average)	9 to 41 (range of individual sites)	2019	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	32 (high site average)	14.4 to 40 (range of individual sites)	2019	No	Byproduct of drinking water disinfection.

Violation 2019-9458438
Farmdale Water District recently failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

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 2/1/2019-2/28/2019, we did not complete all monitoring or testing for Total Coliforms, and therefore cannot be sure of the quality of your drinking water during that time.

We failed to collect an appropriate amount of samples during February 2019. It was an oversight on our part and we are working to ensure we do not fail to do the proper amount of testing in the future. We submitted all necessary samples in March 2019 and returned to compliance at that time.

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

For more information, please contact Brian Armstrong at 502-223-3562 or 100 Highwood Dr., Frankfort, KY 40601.

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.

Violation 2019-9458439

Our water system failed to comply with a required testing procedure. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

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 7/1/2019 – 9/30/2019, we did not complete all monitoring or testing for haloacetic acids (HAA), and therefore cannot be sure of the quality of your drinking water during that time.

Any sample we collect must be sent to and analyzed by a certified laboratory within a specified amount of time. We collected the sample on 8/20/2019 and it was received by our contract lab. The lab was unable to perform the analysis for haloacetic acids due to the lab equipment used to analyze being down, so our lab sent the samples to another lab to be analyzed. Our samples evaporated in transit to this contract lab and not enough of the samples were left to analyze. We sampled in the 4th quarter (10/1/19-12/31/19) for haloacetic acids and returned to compliance.

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

For more information, please contact Brian Armstrong at 502-223-3562 or 100 Highwood Dr., Frankfort, KY 40601.

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.

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

Copies of this report are available at our office and will not be mailed unless requested.