Northeast Woodford County Water District
Water Quality Report 2018

Water System ID: KY1200310 Manager: Dale Gatewood 859-873-5989	CCR Contact: Dale Gatewood 859-873-5989	Mailing Address: 225A South Main St Versailles, KY 40383	Meeting location and time: 225A South Main St 1st Tuesday monthly at 10:00 AM

Our water supply comes from the City of Versailles, which is treated surface water from the Kentucky River. Versailles obtains raw water from Pool 5 of the Kentucky River and is treated at the water plant on US 62 West in Woodford County. When needed, Versailles obtains additional treated water from Kentucky American Water Co. in Lexington, Kentucky. Based on a vulnerability assessment, susceptibility was determined to be moderate. Potential sources of contamination in the source water area include agricultural runoff and two bridges that span the river, where accidents may occur. The complete source water assessment plan can be viewed at the Versailles Municipal Utilities office at 196 South Main Street, Monday through Friday 8am-4pm.

On an as-needed basis we also purchase water from the City of Frankfort, which is treated surface water from the Kentucky River. An analysis of the susceptibility of the water supply to contamination indicates that this susceptibility is generally moderate. However, an accidental release of toxic materials from nearby bridges or roads could pose an immediate threat to the intakes. Other areas of concern that occur in the immediate vicinity of the intakes 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 complete Source Water Assessment Plans are available for inspection at the Frankfort Plant Board Water Treatment Plant. Contact our office for specific service area information.

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.

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.

Regulated Contaminant Testing Results for Versailles Municipal Utilities

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT * Representative samples of filtered w ater	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.09	100	No	Soil runoff

Regulated Contaminant Test Results			Versailles Municipal Utilities				
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Combined radium (pCi/L)	5	0	1.3	1.3 to 1.3	Apr-16	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.02	0.02 to 0.02	Mar-18	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.93	0.93 to 0.93	Mar-18	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.4	0.4 to 0.4	Mar-18	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
Benzo(a)pyrene(PAH) [2306] (ppt)	200	0	BDL	BDL to 47	Apr-17	No	Leaching from linings of water storage tanks and distribution lines
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.4 (lowest average)	1.00 to 2.47 (monthly ratios)	2018	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 Contaminants

Source Water Contaminants (untreated water)							
Cryptosporidium [oocysts/L]	0	TT (99% removal)	2 (positive samples)	3 (no. of samples)	2018	See note below	Human and animal fecal waste

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 2 samples of 3 collected from the raw water source for Versailles Municipal Utilities. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

Unregulated Contaminant Testing Results for Versailles Municipal Utilities

Unregulated Contaminants (UCMR 4)	average	range (ppb)	date
HAA5	46.500	23 to 80	Dec-18
HAA6Br	9.033	4.4 to 13	Dec-18
HAA9	55.167	28 to 92	Dec-18

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not yet 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 Testing Results for Northeast Woodford County Water District

Regulated Contaminant Test Results			Northeast Woodford County Water District				
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Inorganic Contaminants							
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.17 (90th percentile)	0 to 0.64	Aug-17	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	7 (90th percentile)	0 to 8	Aug-17	No	Corrosion of household plumbing systems
Disinfectants/Disinfection Byproducts and Precursors							
Chloramines (ppm)	MRDL = 4	MRDLG = 4	1.65 (highest average)	0.5 to 2.85	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	36 (high site average)	14 to 47 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	39 (high site average)	11.1 to 57.2 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Violation 2019-6301303

Our water system 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 10/1/2018-12/31/2018, we did not complete all monitoring or testing for Total Trihalomethanes (TTHM), and therefore cannot be sure of the quality of your drinking water during that time.

Any sample we collect must be analyzed by a certified laboratory within a specified amount of time. We collected the samples during the fourth quarter in the proper timeframe, but due to an equipment failure in the laboratory, the samples did not get analyzed within the allowed holding 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.

We have since returned to compliance by having a set of samples analyzed for Total Trihalomethanes (TTHM) during the first quarter of 2019. Our laboratory has taken steps to ensure this error does not happen again.

For more information, please contact Dale Gatewood at 859-873-5989 or 225A South Main Street, Versailles, KY 40383.

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

This report will not be mailed unless requested. Copies are available at our office. If you would like a copy mailed to you please contact our office.