Beattyville Water Works
Water Quality Report 2014

Water System ID: KY0650024 WTP Manager: Tony Snowden 606-464-1000	CCR Contact: Tony Snowden 606-464-1000 tsnowden@beattyville.org	Mailing Address: P.O. Box 307 Beattyville, KY 41311	Meeting location and time: 28 Railroad Street, Suite A Second Monday at 6:00 PM

Beattyville treats surface water from the North Fork of the Kentucky River. An analysis of the susceptibility of the water supply to contamination indicates that susceptibility is generally moderate. Areas of concern include highways, bridges, railroads, municipal sewer lines, and hazardous waste users. Customers in the Farm Ridge, Cressmont, and Spencer Ridge areas are supplied by Jackson County Water Association. Jackson County treats surface water from Beulah (Tyner) Lake that has a high susceptibility. Considerable concern for both water sources include soil and stream bank erosion, and fertilizer and pesticide runoff. The complete Source Water Assessment Plans can be reviewed at the respective water system offices during normal business hours.

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.

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.

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT	No more than 1 NTU*	B=	0.22	100	No	Soil runoff
* Representative samples of filtered water	Less than 0.3 NTU in 95% monthly samples	J=	0.09	100		

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	B= J=	0.029 0.013	0.029 to 0.029 0.013 to 0.013	2014	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action leve 0	AL = 1.3	1.3	B=	0.051 (90^{th} percentile)	0.0035 to 0.0885	2014	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	B= J=	0.5 0.9	0.5 to 0.5 0.9 to 0.9	2014	No	Water additive which promotes strong teeth
Lead [1030] (ppb) sites exceeding action leve 0	AL = 15	0	B=	0 (90^{th} percentile)	0 to 2	2014	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	J=	0.2	0.2 to 0.2	2014	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	B= J=	0.96 1.64	-0.29 to 1.96 0.97 to 3.31	2014	**Yes** 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.								
Chlorine (ppm)	MRDL = 4	MRDLG = 4	B=	0.69 (highest average)	0.40 to 1.10	2014	No	Water additive used to control microbes.
HAA (ppb) (Stage 1) [Haloacetic acids] *less than 1 year of quarterly sampling	60	N/A	B=	65 (average)	30 to 85 (range of system sites)	2014	No*	Byproduct of drinking water disinfection
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	B= J=	20 51 (average)	20 to 20 23 to 63 (range of individual sites)	2014	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 1) [total trihalomethanes]	80	N/A	B=	70 (average)	31 to 90 (range of system sites)	2014	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	B= J=	25 74 (average)	24 to 25 30 to 92 (range of individual sites)	2014	No	Byproduct of drinking water disinfection.

Fluoride (added for dental health)	Average	Range of Detection
	0.9	0.66 to 1.08

Violation - 2014-9443844
In June 2014 we had a problem with our set of TOC samples that resulted in a negative ratio value and we failed to collect an additional sample during the month to correct the problem. The negative value caused our running average to fall below the required level.

Total organic carbon (TOC) has no health effects. However, total organic carbon, provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes, or THMs, and haloacetic acids, or HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Violation - 2014-9443845
During 2013 the Southside Water Association became a part of Beattyville Water Works. One of the requirements by Division of Water was to develop and distribute a Consumer Confidence Report for Southside. The report was developed and mailed to all customers of Southside Water Association on May 8, 2014. However, the required certification documents were not mailed to Division of Water. This resulted in a violation. All of the required certification documents have since been submitted to Division of Water.

Monitoring Violation - 2014-9443843
Beattyville Water Works 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 March 2014, we did not complete all monitoring or testing for total coliform, 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 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.

The number of required bacteriological samples collected each month is based upon the population served. When Southside Water Association became a part of Beattyville Water Works the population served increased as did the number of bacteriological samples. We are required to collect nine samples each month and we were collecting four samples during one week and five samples during another week. In March 2014 we mistakenly collected four samples for each week and therefore we were one sample short of our requirement. To prevent a similar incident we now collect five samples twice each month.

For more information, please contact Tony Snowden at 606-464-1000 or P.O. Box 307 Beattyville, KY 41311.

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.