## 2019 Water Quality Report

## Beech Grove Water System Inc.

KY0750529

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Meetings: Beech Grove Fire Department

Public Meetings 2nd Tuesday each month @ 6PM

One source of your drinking water from Henderson Water Utility is surface water from the Green River in Robards, KY. The area around your water source is mostly residential, but contains some industry and agricultural. An analysis of the susceptibility of Henderson's Ohio River and Green River water supplies to contamination indicates that this susceptibility is generally moderate. However, there are a few areas of high concern. Concerns includes bridges, waste generators or transports, landfills, river ports, a railroad, row cropland coverage, urban and recreational grass coverage and sewer lines. The second source of your drinking water from Owensboro Municipal Utilities. They utilize ground water from deep wells to two water treatment plants. The wells are located in one aquifer that runs along US Highway 60 East and is protected by a clay layer. The water is naturally filtered to this aquifer as it passes down through layer of the earth. The final source water assessments for both sources are available at the Green River Area Development District in Owensboro, KY.

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).

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.

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 described health effect.

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. Copies of this report are available upon request by contacting our office during business hours.

A=Henderson South, B= OMU/W. Daviess Co. Plant A, C=

OMU/Daviess Co. Plant B, D= Beech Grove Water System

Contaminant			93.	Report		Rai	nge	Date of	Violation	Likely Source of	
[code] (units)	MCL	MCLG	Source	Level	of Detection				- watton	(*.5000000000000000000000000000000000000	
Radioactive Contamir						n Det	ection	Sample		Contamination	
Alpha emitters	15	0	B=	3	3	to	3	March-19	No		
[4000] (pCi/L)						10	á	Iviai cii-19	INU	Erosion of natural deposits	
Inorganic Contamina	nts		-								
Arsenic	T		B=	1.12	1.12	to	1.12	June-17	No	Natural erosion; runoff from	
[1005] (ppb)	10	N/A	B=	1.12	1.12	to	1.12	June-17	No	orchards or glass and electronic production wastes	
Barium			A=	0.025	0.025	to	0.025	June-17	No		
[1010] (ppm)	2	2	B=	0.0191	0.0191	to	0.0191	June-17	No	Drilling wastes; metal refineries	
			C=	0.0103	0.0103	to	0.0103	June=17	No	erosion of natural deposits	
Fluoride			A=	0.5	0.5	to	0.5	Feb-19	No		
[1025] (ppm)	4	4	B=	0.668	0.668	to	0.668	June-17	No	Water additive which promotes strong teeth	
			C=	0.71	0.71	to	0.71	June-17	No	arrong teeth	
Nitrate [1040] (ppm)	10	10	A=	1.57	1.57	to	1.57	Feb-19	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion on natural deposits	
Disinfectants/Disinfect	ion Bypr	oducts and	l Precu	rsors							
Total Organic Carbon (ppm) (report level=lowest avg.	TT*	N/A	A=	2.14	1.38	to	4.35	2019	No	Naturally present in environmen	
*Monthly ratio is the % TOC	1	L	1								
Monthly ratio is the % TOC r	MRDL	ved to the %	TOC rem	oval required.	Annual av	егаде	must be 1.00	or greater for o	compliance.		
(ppm)	= 4	MRDLG = 4		1.72	1021					Water additive used to control	
pp/	-4	-4		(highest average)	1.33	to	1.92	2019	No	microbes.	
Chlorite	1	0,8	A=	0.540	0.03	to	0.55	2019	No	Byproduct of drinking water	
ppm)				(average)					disinfection.		
Chlorine dioxide (ppb)	MRDL = 800	MRDLG = 800	A=	280	0	to	280	2019	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) Haloacetic acids]	60	N/A	D=	33	13	to	49.7	2019	No	Byproduct of drinking water	
			A2-520.04	(average)			idual sites)	2019	NO	disinfection	
TTHM (ppb) (Stage 2) total trihalomethanes]	80	N/A	D=	33	13.4 to 50 (range of individual sites)		2019	No	Byproduct of drinking water disinfection.		
	-		L	(average)	(range o	indiv	iuuai sites)	L			
Household Plumbing C	ontamina	ints									
opper [1022] (ppm)	AL =			0.000		-		T	7		
tes exceeding action level	1.3	1.3	D=	(90 <sup>th</sup> percentile)	0	to	0.146	19-Sep		Corrosion of household plumbing systems	
Other Constituents				[ bercelline)					1		
urbidity (NTU) TT	Allowable		es.	Highest Single			Lowest	est Violation			
Representative samples	Levels		Source	Measurement			lonthly %	violation	Likely Source of Tout : 24		
urbidity is a measure of the	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples		A=	0.11 0.087 0.077		1	100	No		ikely Source of Turbidity	
arity of the water and not a			B=				100	No		Soil runoff	
ontaminant.			C=			1	100	110		JOH TUHOH	

Unregulated Contaminants (UCMR 4)	B&C	average	range (ppb)			date
HAA5		7.608	6.57	to	9.35	2019
HAA6Br	B & C	10.149	8.95	to	12.11	2019
HAA9	B & C	15.23	13.24	to	17.05	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.

This report will not be sent to individual customers. It will be available at our water office.

## Notice of Violation NOV 2019-9619422 Revised Total Coliform Rule RTCR

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

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 06/01/19-06/30/19 we did not complete all monitoring or testing for 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 do not need to use an alternative (e.g., bottled) water supply.

What happened? Who is at risk? What is being done?

Our system received a Notice of Violation (NOV), from our primacy agency, Kentucky Division of Water. **Description of Non Compliance**: 401 KAR 8: 200 Revised Total Coliform Rule (RTCR) Our public water system failed to submit an adequate number of routine bacteria logical sampling results for the compliance period of 06/01/2019 – 06/30/2019. **Comments**: Sample 06190317 is a duplicate sample and cannot be used for compliance. **Remedial Measures**: Submit any overdue or unreported sampling analytical results call my if available. We now double check our chain of custody forms so the sample numbers are tracked and we do not have duplicates. There were no health effects due to this administrative oversight.

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.