2018 Water Quality Report

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Beech Grove Water System, INC.

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Meetings: Beech Grove Fire Department 2nd Tuesday each month @ 6PM

We purchase drinking water primarily from Henderson Water Utility, which 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. In addition, we purchase drinking water from West Daviess County Water District. They purchase exclusively from Owensboro Municipal Utilities (OMU). OMU utilizes ground water from deep wells in Owensboro. 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. Sources of impact include: storage tanks, automotive facilities petroleum suppliers, and industrial land use. The final source water assessments are available at the Green River Area Development District in Owensboro, KY (270) 926-4433.

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.

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.

A= Henderson Water Ut	ility/South	, B= We	st Da	viess Cou	nty Wat	er D	istrict (OM	IU), C= Bee	ech Grove	Water System
	Allowable		Source	Highest Single			Lowest	Violation		
	_	Levels			Measurement		Monthly %		Likely Source of Turbidity	
Turbidity (NTU) TT	No more th	an 1 NTU*	A=	0.134			100	No		
* Representative samples	Less than 0	ess than 0.3 NTU in		0.18			100	No		Soil runoff
of filtered water	95% month	ıly samples								
Regulated Contaminar	nt Test Re	sults								
Contaminant	MCL MCLG		Source	Report	Range of Detection		Date of Sample	Violation	Likely Source of Contamination	
[code] (units)			So	Level						
Radioactive Contamin	ants									
Alpha emitters [4000] (pCi/L)	15	0	B=	3	3	to	3	March-15	No	Erosion of natural deposits
Combined radium	5	0	A=	1.1	1.1	to	1.1	Aug-14	No	Erosion of natural deposits
(pCi/L)										Elosion of natural deposits
Inorganic Contaminan	its									
Arsenic			B=	1.12	0	to	1.12	July-17	No	Natural erosion; runoff from
[1005] (ppb)	10	N/A								orchards or glass and electronics production wastes
Barium			A=	0.027	0.27	to	0.027	Jan-18	No	
[1010] (ppm)	2	2	B=	0.019	0.01	to	0.019	Jan-17	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper [1022] (ppm)	AL =			0.000						Corrosion of household plumbing
sites exceeding action level	1.3	1.3	C=	(90 th percentile)	0	to	0.146	Sept-17	No	systems
Fluoride			A=	0.63	0.63	to	0.63	Jan-18	No	
[1025] (ppm)	4	4	B=	0.71	0.67	to	0.71	June-17	No	Water additive which promotes strong teeth
Nitrate			A=	0.05	0.05	to	0.05	Jan-18	No	Fertilizer runoff; leaching from
[1040] (ppm)	10	10		0.05	0.00		0.05	Juli 10	1,0	septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfect	ion Bypro	ducts and	Prec	cursors					•	•
Total Organic Carbon (ppm)			A=	1.99	1.13	to	2.94	2018	No	
(report level=lowest avg.	TT*	N/A								Naturally present in environment.
range of monthly ratios)										
*Monthly ratio is the % TOC to	emoval achie	eved to the %	TOC 1	removal requ	ired. Annı	ıal av	erage must be	1.00 or greate	r for complia	nce.
Chlorine	MRDL	MRDLG		1.59						Water additive used to control
(ppm)	= 4	= 4	C=	(highest average)	1.11	to	2.00	2018	No	microbes.
Chlorite	1	0.8	A=	0.580	0.015	to	0.65	2018	No	Byproduct of drinking water
(ppm)				(average)						disinfection.
Chlorine dioxide (ppb)	MRDL = 800	MRDLG = 800		160	0	to	160	2018	No	Water additive used to control microbes.
HAA (nph) (C+ 2)	- 600	- 800	A=	100	U	to	100	2010	110	-
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	C=	32	13	to	50.2	2018	No	Byproduct of drinking water disinfection
TTTID ((1) (C) (C)			 	(average)	(range o	n indi	ividual sites)		 	
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	C=	34	1.3	to	55.4	2018	No	Byproduct of drinking water disinfection.
			<u> </u>	(average)	(range o	of indi	ividual sites)			<u> </u>

This report will not be sent to individual customers. It will be available at our Water Office.

Notice of Violation 2018 - 9619420 / 8000 REVISED TOTAL COLIFORM RULE

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 07/01/2018 - 07/31/2018 we did not complete all monitoring or testing for 8000 REVISED TOTAL COLIFORM RULE 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?

Description of Non Compliance: 401: KAR 8:200 REVISED TOTAL COLIFORM RULE (RTCT) The public water system failed to submit an adequate number of routine bacteriological sampling results for compliance period 07/01/2018 - 07/31/2018. Comments: 1 of 2 samples was submitted without sample code. Remedial measure (s): Submit any overdue or unreported sampling analytical results, if available. We resubmitted the sample results. 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.

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.