2017 Water Quality Report ***Lake Village Water Association, Inc.*** **KY0840587**

Manager: Mike D Sanford Contact: Mike D Sanford Phone: 859-748-5642

Address: 801 Pleasant Hill Drive Burgin, Kentucky 40310

Meetings: Lake Village Water Association Office Second Tuesday of each month at 12:00 pm

The Lake Village Water Association purchases water from the City of Harrodsburg (A in table) and the City of Danville (B in table), both surface water sources. The source for the City of Harrodsburg is the Kentucky River and the source for the City of Danville is Herrington Lake. Source Water Assessments have been completed for both water sources to identify potential contamination threats. The susceptability analysis indicates that the susceptibility is generally moderate although there are areas of concern. Herrington Lake, a tributary to the Kentucky River has been identified as impaired and the analysis of the lake helped to identify conditions in the watershed that could adversely affect source water quality. The areas of concern include power line right-of-ways, areas of row crops, major roadways and railways, large capacity septic systems, numerous permitted operations and activities and other potential sources of moderate concern within the greater watershed that increases the potential for release of contaminants within the area. The Source Water Assessment Plans are available at Harrodsburg City Hall, Danville Water Department and the BGADD office in Lexington.

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.

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT	No more than 1 NTU*	A=	0.12	100	No	
* Representative samples	Less than 0.3 NTU in	B=	0.014	100	No	Soil runoff
of filtered water	95% monthly samples					

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Total Coliform Bacteria # or % positive samples	TT	N/A		1	N/A	Sep-17	No	Naturally present in the environment
Barium [1010] (ppm)	2	2	A=	0.02	0.02 to 0.02	Mar-17	No	Drilling wastes; metal refineries; erosion of natural deposits
			B=	0.02	0.02 to 0.02	Mar-17	No	
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3		0.150 (90^{th} percentile)	0 to 0.23	Aug-17	No	Corrosion of household plumbing systems
Fluoride [1025] (ppm)	4	4	A=	0.6	0.6 to 0.6	Mar-17	No	Water additive which promotes strong teeth
			B=	0.7	0.7 to 0.7	Mar-17	No	
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0		0 (90^{th} percentile)	0 to 0.015	Aug-17	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	A=	0.5	0.5 to 0.5	Nov-17	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
			B=	1.7	1.7 to 1.7	Feb-17	No	
Chlorobenzene [2989] (ppb)	100	100	B=	0.9	0.9 to 0.9	Mar-17	No	Discharge from chemical and agricultural chemical factories
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A=	1.24	1 to 2.21	2017	No	Naturally present in environment.
			B=	2.33	1.43 to 5.01	2017	No	
*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		1.46 (highest average)	1.12 to 2.13	2017	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A		50 (average)	11 to 64 (range of individual sites)	2017	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A		67 (average)	20.7 to 93.1 (range of individual sites)	2017	No	Byproduct of drinking water disinfection.

Cryptosporidium: We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water.

City of Harrodsburg: Cryptosporidium is a microbial pathogen found in surface water. Cyptosporidium was detected in 1 sample of 12 collected from the raw water source for our water system. It was not detected in the finished water. Correct 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.

City of Danville: Cryptosporidium is a microbial pathogen found in surface water. Cyptosporidium was detected in 6 samples of 12 collected from the raw water source for our water system. It was not detected in the finished water. Correct 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.

Other Contaminants								
Cryptosporidium [oocysts/L]	0	TT (99% removal)	A= B=	1 6 (positive samples)	12 12 (no. of samples)	2017 2017	See Note Below	Human and animal fecal waste

City of Harrodsburg= A

	Average	Range of Detection		
Fluoride (added for dental health)	0.80	0.6	to	1
Sodium (EPA guidance level = 20 mg/L)	8.00	8	to	8

City of Danville= B

	Average	Range of Detection		
Fluoride (added for dental health)	0.80	0.6	to	1
Sodium (EPA guidance level = 20 mg/L)	8.00	8	to	8

Secondary contaminants do not have a direct impact on the health of consumers and are not required in the Consumer Confidence Report. They are being included to provide addition information about the quality of the water.

City of Harrodsburg = A

Secondary Contaminant	Maximum Allowable Level		Report Level	Range of Detection			Date of Sample
Chloride	250 mg/l		13	13	to	13	Mar-17
Corrosivity	Noncorrosive		-0.81	N/A			Aug-17
Fluoride	2.0 mg/l		0.6	0.6	to	0.6	Mar-17
pH	6.5 to 8.5		7.45	7.43	to	7.47	Aug-17
Sulfate	250 mg/l		49	49	to	49	Mar-17
Total Dissolved Solids	500 mg/l		254	124	to	384	Aug-17

City of Danville = B

Secondary Contaminant	Maximum Allowable Level		Report Level	Range of Detection			Date of Sample
Aluminum	0.05 to 0.2 mg/l		0.11	0.11	to	0.11	Feb-17
Chloride	250 mg/l		23	23	to	23	Feb-17
Corrosivity	Noncorrosive		-0.056	N/A			Feb-17
Fluoride	2.0 mg/l		0.7	0.7	to	0.7	Feb-17
Iron	0.3 mg/l		0.02	0.02	to	0.02	Feb-17
pH	6.5 to 8.5		7.6	7.6	to	7.6	Feb-17
Sulfate	250 mg/l		17	17	to	17	Feb-17
Total Dissolved Solids	500 mg/l		172	172	to	172	Feb-17

City of Danville Violations

2017-9950326

We received this violation because the certification documents for the public notice for violation 2017-9950325 (HAA exceeded) was not mailed to the Division of Water within 10 days after the notice was distributed. The public notice was distributed on 1/30/2017 and the certification documents were misplaced in our office and not mailed until 2/20/2017. We have reviewed our procedures to prevent similar situations.

2018-9950328

We received this violation because the certification package for our 2015 did not contain a hardcopy of the CCR. The package contained all other required documents and information on a link to an electronic version posted on the internet. The 2015 CCR also listed two HAA MCLs higher than they actual were because the Division of Water had calculated based upon system-wide averages and we calculated based upon individual site averages. We had requested an extension to the change in calculations and were doing calculations based upon the current requirements. A hard copy of the 2015 CCR is being submitted with the certification package for this report.

2018-9950329

We received this violation because the public notice for violation 2016-9950324 (failure to submit an OEL) was not included in the 2016 CCR. An OEL document was generated but not submitted correctly to Division of Water. The misplaced OEL was located and submitted to Division of Water in September 2016. In discussions with Division of Water we assumed that this violation was to be rescinded but it was not. A public notice for violation 2016-9950324 is being distributed at the same time as this report. This violation also included a mistake on our certification documents for violation 2016-9950322. The certification had an incorrect date of 1/19/2017 as the date of primary distribution and no date for secondary distribution. The actual date of the primary distribution was 6/14/2017 and the secondary distribution was 6/16/2017. A corrected PN certification document for 2016-9950322 is being included with the certification documents for this report.

2016-9950324

Our water system violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this 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 4/1/2016 – 6/30/2016, we did not complete all monitoring by failing to report or correctly report testing for Haloacetic Acids and Trihalomethanes (OEL). Therefore, we could not verify the quality of your drinking water to the primacy agency during that time.

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. For the Stage 2 DBPR requirements we monitor for trihalomethanes (THM) and haloacetic acids (HAA). The standard for THM is 0.080 mg/L and the standard for HAA is 0.060 mg/L.

A calculation of analytical results is part of an Operational Evaluation Level Report (OEL) to determine the potential of exceeding these standards. The operational evaluation requirements are intended as an indicator of operational performance and to allow systems to identify proactive steps to remain in compliance. Failure to submit an evaluation report to the State in the required time frame is a violation and requires a public notification.

There is nothing you need to do. Our calculations for the first quarter 2016 indicated the necessity for an OEL to be submitted to Division of Water. The OEL was developed but was placed in another packet of documents that were delivered to Division of Water. Our error was not discovered until we received a violation for not submitting the OEL during the second quarter of 2016.The document was located and submitted in September 2016.

For more information, please contact Andy Tompkins at 859-238-1241 or Box 670, Danville, KY 40423.

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.

Lake Village Water Association Violations

2017-9950530

Our water system violated a drinking water requirement over the past year. There is no risk to the population. 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.

On July 21, 2016 the Public Notice packet sent to the primacy agency for violation 2016-9950528 (1st Quarter 2016 HAA MCL), was missing all proof of delivery for both methods. Primary delivery was listed as mailed to customers and secondary delivery was listed as posted in the Association office. Proof of postage should have been included in the packet and was not. Also, the public notice must be posted in five locations and was not.

What should I do?

No alternate water supply should be used. 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.

There is nothing you need to do at this time and there are no potential health effects associated with the violation.

What is being done?

Due to the nature of the violation, the corrective action consisted of the submittal of the proof of postage, public notification of the violation and posting in five locations. The Association has returned to compliance with the issuance of the public notice.

For more information, please contact Mike Sanford at (859) 748-5642 or at P.O. Box 303, Burgin Kentucky 403310.

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.

This notice is being sent to you by the Lake Village Water Association. State Water System ID#: KY0840587.
Date distributed: March 21, 2018.

2017-9950531

Our water system violated a drinking water requirement over the past year. There is no risk to the population. 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.

On April 5, 2016 the Public Notice packet sent to the primacy agency for violation 2016-9950526 (4th Quarter 2015 HAA MCL), was missing all proof of delivery for both methods. Primary delivery was listed as mailed to customers and secondary delivery was listed as posted in the Association office. Proof of postage should have been included in the packet and was not. Also, the public notice must be posted in five locations and was not.

What should I do?

No alternate water supply should be used. 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.

There is nothing you need to do at this time and there are no potential health effects associated with the violation.

What is being done?

Due to the nature of the violation, the corrective action consisted of the submittal of the proof of postage, public notification of the violation and posting in five locations. The Association has returned to compliance with the issuance of the public notice.

For more information, please contact Mike Sanford at (859) 748-5642 or at P.O. Box 303, Burgin Kentucky 403310.

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.

This notice is being sent to you by the Lake Village Water Association. State Water System ID#: KY0840587.
Date distributed: March 21, 2018.

Lake Village Water Association, Inc.
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