2020 Water Quality Report ***North Mc Lean County Water District*** **KY0300320**

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Meetings: 217 HILL STREET, LIVERMORE, KY 42352 Public Meetings 3rd Mon. each month at 7:00 pm

We purchase the majority of our water from the Mc Lean County Regional Water Commission (MCRWC). MCRWC draws its water from the Green River, that is classified as surface water. Breif Source Water Asessment Summary indicates overall susceptibility is generally moderate. Potential sources of concern include: bridges, row crops, water plant, 6 major roads, 14 oil and gas wells, woodlands, agricultural activity. Our second largest supplier of water is West Daviess County Water District. They purchase water from Owensboro Municipal Utilities(OMU). The source for OMU is groung water wells on the Ohio River Alluvium(sand and gravel) in Daviess County. An analysis of the overall susceptibility to contamination of the OwensboroMuncipal Utilities' water supplu indicated that this susceptibility is moderate. Sources of porential impact include: above ground storage tanks, underground tanks, professinal offices, dry cleaners, food service facilities, quaries, hazardous material storage, and municipal land use. Susceptibility Analysis Reports are available at the Green River Area Development District(GRADD)(270-926-4433). Ohio County Water District is an alternate source of water.

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= Mc Lean County Regional Water Commission, B= West Daviess County Water District / Owensboro Municipal Utilities (OMU) Plant A, C=OMU Plant B, D= North Mc Lean County Water District

Regulated Contaminant Test Results — North Mc Lean County Water District

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants								
Beta photon emitters (pCi/L)	50	0	B=	2.25	2.25 to 2.25	June-20	No	Decay of natural and man-made deposits
Alpha emitters [4000] (pCi/L)	15	0	B=	1.96	1.96 to 1.96	June-20`	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	B=	1.26	1.26 to 1.26	June-20	No	Erosion of natural deposits
Inorganic Contaminants								
Barium [1010] (ppm)	2	2	A= B=	0.021 0.0199	0.021 to 0.021 0.0199 to 0.0199	May-2020 June-20	No No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	A= B=	0.75 0.72	0.75 to 0.75 0.72	May-2020 June-20	No No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	A= C=	1.25 0.285	0.65 to 1.25 0.285	Feb-2020 June-20	No No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants/Disinfection Byproducts and Precursors								
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A=	1.78	0.61 to 2.13	2020	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	D=	1.23 (highest average)	0.24 to 2.14	2020	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	D=	41 (average)	29 to 48 (range of individual sites)	2020	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	D-	63 (average)	32 to 88 (range of individual sites)	2020	No	Byproduct of drinking water disinfection.
Household Plumbing Contaminants								
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	D=	.0059 (90^{th} percentile)	0 to 0.0257	Aug-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	D=	2 (90^{th} percentile)	0 to 4	Aug-20	No	Corrosion of household plumbing systems
Source Water Contaninants (untreated water)								
Cryptosporidium [oocysts/L]	0	TT (99% removal)	A=	3 (positive samples)	8 (no. of samples)	2020	See note below	Human and animal fecal waste

Other Constituents						
Turbidity (NTU) TT * Representative samples	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant.	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples	A= B= C=	0.29 0.298 0.132	100 100 100	No No No	Soil runoff

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 3 samples of 8 collected from the raw water source for our water system. 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.

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.

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This report will not be sent to individual customers.

Notice of Violation 2021 - 9949317 FAILURE TO COMPLETE LEVEL 1 ASSESSMENT / REVISED TOTAL COLIFORM RULE (RTCF)

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

North Mc Lean Water District Failed to Perform Activities Required to Address Coliform Bacteria Contamination of the Water System

During recent routine monitoring, our water system tested positive for total coliforms. *Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.

When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found. We failed to conduct the required assessment* by 10/01/20.

As our customers, you have a right to know what happened and what we are doing to correct this situation.

What should I do?

•You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.

•If you have a severely compromised immune system, are pregnant, or are elderly, you may be at increased risk and should seek advice from your healthcare provider about drinking this water. You should also seek advice from your healthcare provider about using the water if you have an infant. General guidelines on ways to lessen the risk of infection by bacteria and other disease-causing organisms are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

Since total coliform bacteria are generally not harmful themselves, this is not an emergency. If it had been you would have been notified within 24 hours.

Failure to identify and correct the defects has the potential to cause continued distribution system contamination. Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

What is being done?

The Level 1 Assessment was completed and submitted to DOW. Corrective actions included detailing this NOV in the 20220 CCR, performing Public Notification and the required Certification. Our operators have been trained by our Lab. Operators take and handle samples in a proper maner].

For more information, please contact Micheal Latham at (270) 499-3788 or PO Box 68. Livermore , KY 42352.

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 [water system name]. State Water System ID#: KY0300320.

Date distributed: _____.