## Fleming-Neon Water Company Water Quality Report 2020

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Mailing Address: P.O. Box 66 Neon, KY 41840 Meeting location and time: Fleming Neon City Hall Third Mondays at 6:00 PM

Fleming Neon Water Company distributes treated water for the towns of Fleming-Neon, McRoberts, Haymond, Jackhorn, and Seco. Fleming Neon Water Company treats ground water from a well located in Sheasfork in the community of McRoberts. A Source Water Assessment indicates that the susceptibility to contamination is generally low. However, a few areas of concern have been identified including transportation corridors through the protection area, heating oil tanks, mining operations and other business activities that have the potential for release of hazardous chemicals. The complete Source Water Assessment Plan can be reviewed at the Fleming Neon City Hall.

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.

 $\textbf{Below Detection Levels (BDL)} \text{ -} laboratory analysis indicates that the contaminant is not present.}$ 

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.

Regulated Contamina	nt Test R	esults	Fleming-N	eon Wa	ter C	Company			
Contaminant			Report Range			ge	Date of	Violation	Likely Source of
[code] (units)	MCL	MCLG	Level	0	f Detec	ction	Sample		Contamination
Barium [1010] (ppm)	2	2	0.021	0.021	to	0.021	Feb-20	No	Drilling wastes; metal refineries; erosion of natural deposits
Nitrate [1040] (ppm)	10	10	0.621	0.621	to	0.621	Feb-20	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Selenium [1045] (ppb)	50	50	11.5	11.5	to	11.5	Feb-20	No	Discharge from petroleum and metal refineries or mines; erosion of natural deposits
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.29 (highest average)	0.59	to	1.54	2020	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	5 (high site average)	3 (range o	to of indiv	5 idual sites)	2020	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	7 (high site average)	6 (range o	to of indiv	7	2020	No	Byproduct of drinking water disinfection.
Household Plumbing	Contami	nants	•						•
Copper [1022] (ppm) sites exceeding action level	AL= 1.3	1.3	0.232 (90 <sup>th</sup>	0.0218	to	0.301	Sep-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level	AL= 15	0	9 (90 <sup>th</sup> percentile)	0	to	28	Sep-20	No	Corrosion of household plumbing systems

## Violation ID 2020-9528141

In May of 2020, Fleming-Neon Water failed to maintain the free chlorine residual disinfectant level above 0.2 mg/L in the distribution system on May 7<sup>th</sup>. This was due to our chlorine feeder going down for a few days. Chlorine residuals returned to normal the following day.



Regulated Contamina	nt Test R	esults	Jenk	ins (J)	Knott	<b>Co</b> (1	K)				
Contaminant			rce	Report	Range			Date of	Violation	Likely Source of	
[code] (units)	MCL	MCLG	Source	Level	l of Detection		ction	Sample		Contamination	
Radioactive Contamin	nants		•		•				*	•	
Beta photon emitters	50	0	J=	1.21	1.21	to	1.21	2017	No	Decay of natural and man-made	
(pCi/L)										deposits	
Alpha emitters	15	0	J=	1.41	1.41	to	1.41	2017	No		
[4000] (pCi/L)			K=	6.3	6.3	to	6.3	2016	No	Erosion of natural deposits	
Combined radium	5	0	J=	1.436	1.436	to	1.436	2017	No		
(pCi/L)										Erosion of natural deposits	
Uranium	30	0	J=	0.193	0.193	to	0.193	2017	No		
(μg/L)										Erosion of natural deposits	
Inorganic Contamina	nts	<u> </u>	1								
Fluoride			J=	0.59	0.59	to	0.59	2020	No	Water additive which promotes strong teeth	
[1025] (ppm)	4	4	K=	0.69	0.69	to	0.69	2020	No		
Nitrate			J=	0.07	0.07	to	0.07	2020	No	Fertilizer runoff; leaching from	
[1040] (ppm)	10	10	K=	0.07	0.07	to	0.07	2020	No	septic tanks, sewage; erosion o natural deposits	
Selenium			J=	0.6	0.6	to	0.6	2020	No	Discharge from petroleum and	
[1045] (ppb)	50	50	K=	0.5	0.5	to	0.5	2020	No	metal refineries or mines; erosio of natural deposits	
Disinfectants/Disinfec	tion Byp	roducts a	nd P	recursor	S			•	<del>!</del>		
Total Organic Carbon (ppm)			J=	1.16	1	to	1.74	2020	No		
(report level=lowest avg.	TT*	N/A	K=	1.58	1.03	to	1.95	2020	No	Naturally present in environment	
range of monthly ratios)						to					
*Monthly ratio is the % TOC 1	emoval achi	eved to the %	TOC	removal requ	uired. Ann	ual av	erage must b	e 1.00 or great	er for compli	ance.	
<b>Other Constituents</b>											
Turbidity (NTU) TT	Allowable		Source	Highest S	ighest Single		Lowest	Violation			
* Representative samples	Levels		Sor	Measurement			Monthly %			Likely Source of Turbidity	
Turbidity is a measure of the	No more than 1 NTU*		J=	0.38 0.06			98	No			
clarity of the water and not a contaminant.	Less than 0.3 NTU in		K=				100	No	Soil runoff		
	95% monthly samples										