

# Northern Kentucky Water District

## 2020 Water Quality REPORT



### Water Source Information

Northern Kentucky Water District (NKWD) is the largest water district and the third largest water utility in the state of Kentucky. NKWD serves approximately 300,000 people in Campbell and Kenton counties and portions of Boone, Grant and Pendleton counties. The Water District has a staff of individuals who are fully committed to excellence, working hard to uphold the District's mission – to provide our customers a safe, clean and sufficient water supply through a reliable system that meets all State and Federal standards, while delivering great value at a reasonable cost.

NKWD operates three water treatment plants. They are Taylor Mill, Fort Thomas and Memorial Parkway. The Taylor Mill treatment plant's water source is the Licking River while the Fort Thomas and Memorial Parkway treatment plants draw water from the Ohio River.

### Drinking Water Regulations

NKWD's drinking water meets all of the Environmental Protection Agency's (EPA) health standards. Our lab analysts gather water samples from over 155 locations each month. We want to make sure that we have an accurate picture of the water quality. Please refer to the charts for more information regarding the water quality data for the calendar year of 2020.

The surface water sources for NKWD are the Ohio and Licking rivers. A source water assessment has been completed on each. The following is a summary of the susceptibility analysis that is part of the source water assessment. Several areas of concern are related to the extensive development of transportation infrastructure, the potential for spills, high degree of impervious cover and polluted runoff. Areas of row crops and urban and recreational grasses introduce the potential for herbicide, pesticide, and fertilizer use – possible nonpoint source contaminants. Bridges, railroads, ports, waste handlers or generators, and Tier II hazardous chemical



Ohio River  
Pump  
Station



Fort Thomas  
Treatment  
Plant



Fort  
Thomas  
Treatment  
Plant  
Storage

users\* in the area introduce the potential for spills or leaks of hazardous materials into the source water. Landfills and permitted discharges are relatively high in number for a supply area. Other areas of concern include several segments of streams already assessed as having impairments, power lines right-of-way with potential herbicide use, and residential septic systems located throughout the watershed. Since the intakes are in urban areas, the threat of underground storage tanks leaking must also be taken into account. The entire source water assessment report is available at the Northern Kentucky Area Development District, 22 Spiral Drive, Florence, KY 41042. Phone: 859-283-1885.

\* Tier II hazardous chemical users apply to any facility that is required under regulations by the Occupational Safety and Health Administration to prepare or have available a Safety Data Sheet for a hazardous chemical present at the facility.

## Regulated Contaminants in the Water Supply

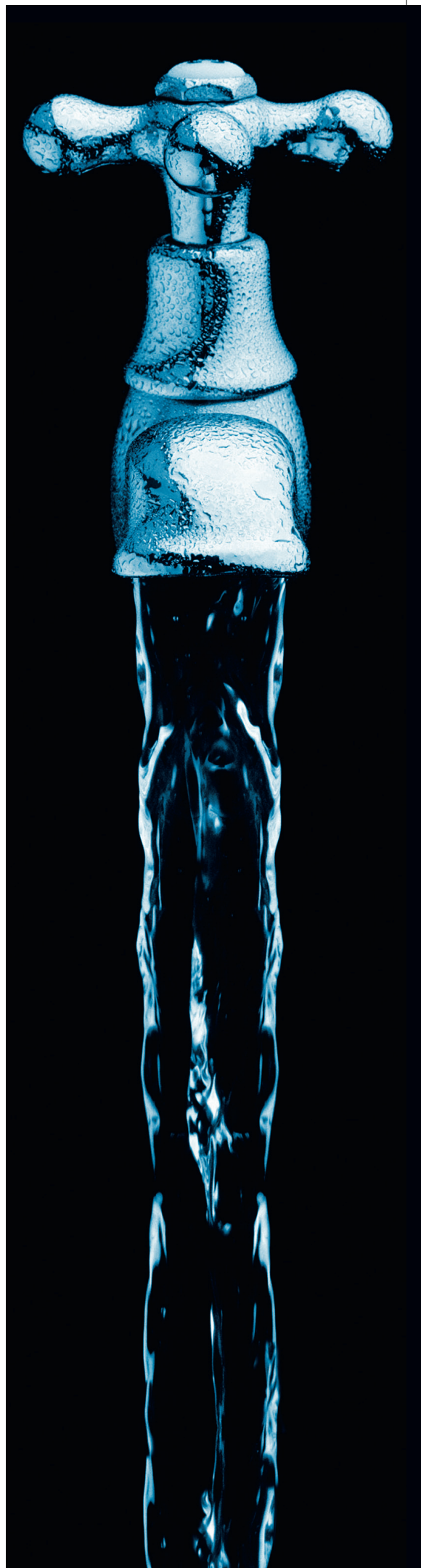
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants that may be present in source water include:

- 💧 **Microbial Contaminants.** Examples include viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- 💧 **Inorganic Contaminants.** Examples include salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- 💧 **Pesticides and Herbicides.** These may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- 💧 **Organic Chemical Contaminants.** These include synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- 💧 **Radioactive Contaminants.** These can be naturally-occurring or be the result of oil and gas production and mining activities.





# Important Information about Your Drinking Water

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 report in a public place or distributing copies by hand or mail.

## Important Information

### Sources of Infection by Cryptosporidium and other Microbial Contaminants

There are many sources of Cryptosporidium (Crypto) and other microbial contaminants. For example, foods such as unwashed fruits and vegetables (especially from outside of the United States), swimming pools, recreational water, day care centers, pets and nursing homes are common sources.

Crypto, a microbial parasite that can cause the disease Cryptosporidiosis, is found in surface water throughout the U.S. Crypto must be ingested in order for it to cause disease and may be passed through means other than drinking water. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult with their doctor regarding appropriate precautions to take to avoid infection. Although filtration removes Crypto, the most commonly-used filtration methods cannot guarantee 100 percent removal. NKWD tests the Ohio and Licking Rivers for Crypto. Crypto was not detected in either river during the years 2009–2015. In 2016 and 2017 our monitoring indicated the presence of these organisms in our source water. The following low level detections occurred:

Location	Date	oocysts per liter
Licking River	6/2016	0.18
Ohio River	3/2017	0.09

Current methods do not allow us to determine if the organisms are capable of causing disease. NKWD's testing of the water supply goes beyond the testing required by the EPA. Our treatment standards are higher than those required by law and are continually being improved. Optimization of our advanced treatment processes help ensure the removal of crypto.

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 for 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 at 1-800-426-4791.

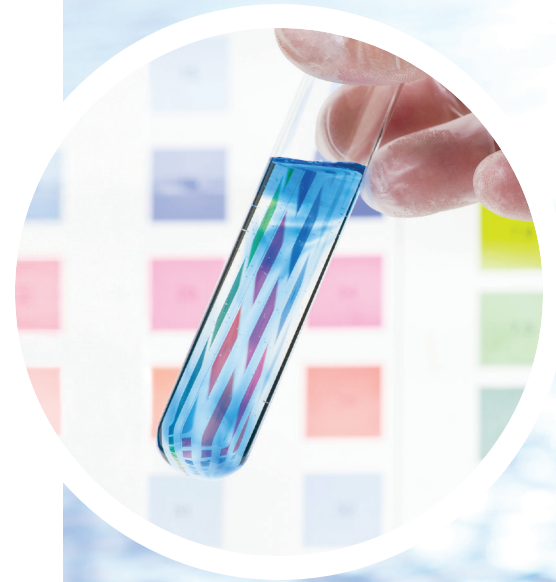
## Information about Lead

The water samples collected for NKWD's compliance monitoring did not show elevated levels of 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. The NKWD 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 <https://www.epa.gov/safewater/lead>. The NKWD does have corrosion control treatment. The NKWD adds a corrosion inhibitor that binds the lead in the pipe and creates a barrier to prevent corrosion throughout the system. You may also visit our website at [www.nkywater.org](http://www.nkywater.org) for additional information.

## Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR)

Disinfection of drinking water is one of the important steps in water treatment, but sometimes the disinfectants can react with naturally-occurring materials in the water to form byproducts. Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5) are disinfection byproducts that NKWD is required to monitor. The Stage 2 DBPR is an EPA Federal Regulation that looks at levels of TTHMs and HAA5 in water. Please refer to the 2020 Water Quality Data charts.

In an effort to reduce the disinfection byproducts and meet the Stage 2 DBPR requirements, NKWD has implemented advanced treatment technologies. The major components of advanced treatment include post-filtration granular activated carbon (GAC) adsorption followed by ultraviolet light (UV) treatment. The EPA considers GAC to be "best available treatment" for the DBPR regulation and is an additional barrier for some of the emerging compounds. UV is considered an excellent, cost-effective process to provide an additional barrier against microbial compounds. Implementation of advanced treatment allows NKWD to meet Stage 2 DBPR requirements and other current and future water quality concerns.





# Northern Kentucky Water District

## Service Area\*



-  Fort Thomas and Taylor Mill System
-  Fort Thomas System Only
-  Memorial Parkway System

\* The Service Area map does not include all wholesale customers.

## Abbreviations and Definitions

**MCL** = Maximum Contaminant Level. 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.

**MCLG** = Maximum Contaminant Level Goal. 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.

**TT** = Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water.

**AL** = Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Turbidity** = A measurement of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

**ND** = Not Detected above the reporting limit.

**ntu** = Nephelometric turbidity units.

**mrem/yr** = Millirems per year.

**pCi/l** = Picocuries per liter.

**Range of Detection** = The lowest and highest levels of detection.

**MRDL** = Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG** = Maximum Residual Disinfectant Level Goal. 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.

**ppm** = parts per million, or milligrams per liter, mg/l.

**ppb** = parts per billion, or micrograms per liter, ug/l.

**ppt** = parts per trillion, or nanograms per liter, ng/l.

# 2020 Water Quality Data

## Fort Thomas System

Contaminant (units)	Average Level Detected	Range of Detections		Highest Annual Average	MCL	MCLG	Violation Yes/No	Typical Sources of Contaminant
		Lowest	Highest					
<b>Total Coliform Bacteria</b> (% positive samples)	0%	0%	1.82%	—	TT (<5% Positive)	N/A	No	Naturally present in the environment
<b>Barium</b> (ppm)	0.022	0.022	0.022	0.022	2	2	No	Erosion of natural deposits; discharge of drilling wastes; and discharge from metal refineries
<b>Chlorine</b> (ppm)	1.15	1.01	1.28	1.21	4 (MRDL)	4 (MRDLG)	No	Water additive used to control microbes
<b>Fluoride</b> (ppm)	0.87	0.87	0.87	—	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Nitrate</b> (ppm)	0.94*	0.73	0.94	—	10	10	No	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks; sewage
<b>Turbidity</b> (ntu)	0.06	0.04	0.09	100%**	TT**	N/A	No	Soil runoff
<b>HAA5</b> [haloacetic acid 5] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	4.6	ND	10.4	8.92†	60	N/A	No	Byproduct of drinking water disinfection
<b>TTHMs</b> [total trihalomethanes] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	34.7	17.3	105.4	43.23†	80	N/A	No	Byproduct of drinking water chlorination
<b>TOC</b> [total organic carbon] (ppm) measured as ppm, but reported as a ratio.	2.67	1.95	3.01	2.67‡	TT‡	N/A	No	Naturally present in the environment

\* **Nitrate** = Highest Level Detected not Average Level Detected

\*\* **Turbidity TT** = Lowest monthly percentage of samples meeting the turbidity limits. Never more than 1 NTU. Less than 0.3 NTU 95% of samples each month.

† Highest locational running annual average calculated quarterly.

‡ TT for TOCs is based on the lowest running annual average of the monthly ratios of the percent TOC removal achieved to the percent TOC removal required. A minimum ratio of 1.00 is required to meet the TT.

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.

# 2020 Water Quality Data

## Taylor Mill System

Contaminant (units)	Average Level Detected	Range of Detections		Highest Annual Average	MCL	MCLG	Violation Yes/No	Typical Sources of Contaminant
		Lowest	Highest					
<b>Total Coliform Bacteria</b> (% positive samples)	0%	0%	1.82%	—	TT (<5% Positive)	N/A	No	Naturally present in the environment
<b>Barium</b> (ppm)	0.011	0.011	0.011	0.011	2	2	No	Erosion of natural deposits; discharge of drilling wastes; and discharge from metal refineries
<b>Chlorine</b> (ppm)	1.15	1.01	1.28	1.21	4 (MRDL)	4 (MRDLG)	No	Water additive used to control microbes
<b>Fluoride</b> (ppm)	0.67	0.67	0.67	—	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Nitrate</b> (ppm)	0.41*	0.41	0.41	—	10	10	No	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks; sewage
<b>Turbidity</b> (ntu)	0.06	0.03	0.13	100%**	TT**	N/A	No	Soil runoff
<b>HAA5</b> [haloacetic acid 5] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	4.6	ND	10.4	8.92†	60	N/A	No	Byproduct of drinking water disinfection
<b>TTHMs</b> [total trihalomethanes] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	34.7	17.3	105.4	43.23†	80	N/A	No	Byproduct of drinking water chlorination
<b>TOC</b> [total organic carbon] (ppm) measured as ppm, but reported as a ratio.	1.41	1.23	1.51	1.41‡	TT‡	N/A	No	Naturally present in the environment

\* **Nitrate** = Highest Level Detected not Average Level Detected

\*\* **Turbidity TT** = Lowest monthly percentage of samples meeting the turbidity limits. Never more than 1 NTU. Less than 0.3 NTU 95% of samples each month.

† Highest locational running annual average calculated quarterly.

‡ TT for TOCs is based on the lowest running annual average of the monthly ratios of the percent TOC removal achieved to the percent TOC removal required. A minimum ratio of 1.00 is required to meet the TT.

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.

# 2020 Water Quality Data

## Memorial Parkway System

Contaminant (units)	Average Level Detected	Range of Detections		Highest Annual Average	MCL	MCLG	Violation Yes/No	Typical Sources of Contaminant
		Lowest	Highest					
<b>Total Coliform Bacteria</b> (% positive samples)	0%	0%	1.82%	—	TT (<5% Positive)	N/A	No	Naturally present in the environment
<b>Barium</b> (ppm)	0.022	0.022	0.022	0.022	2	2	No	Erosion of natural deposits; discharge of drilling wastes; and discharge from metal refineries
<b>Chlorine</b> (ppm)	1.15	1.01	1.28	1.21	4 (MRDL)	4 (MRDLG)	No	Water additive used to control microbes
<b>Fluoride</b> (ppm)	0.89	0.89	0.89	—	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Nitrate</b> (ppm)	1.01*	0.61	1.01	—	10	10	No	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks; sewage
<b>Turbidity</b> (ntu)	0.08	0.04	0.30	100%**	TT**	N/A	No	Soil runoff
<b>Beta/Photon Emitters</b> (pCi/l)*** Data collected in 2016	4.6	4.6	4.6	—	50	0	No	Decay of natural and man-made deposits
<b>HAA5</b> [haloacetic acid 5] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	4.6	ND	10.4	8.92†	60	N/A	No	Byproduct of drinking water disinfection
<b>TTHMs</b> [total trihalomethanes] (ppb) Stage 2 Disinfectants and Disinfection Byproducts Rule Data	34.7	17.3	105.4	43.23†	80	N/A	No	Byproduct of drinking water chlorination
<b>TOC</b> [total organic carbon] (ppm) measured as ppm, but reported as a ratio.	2.97	2.26	3.50	2.88‡	TT‡	N/A	No	Naturally present in the environment

\* **Nitrate** = Highest Level Detected not Average Level Detected

\*\* **Turbidity TT** = Lowest monthly percentage of samples meeting the turbidity limits. Never more than 1 NTU. Less than 0.3 NTU 95% of samples each month.

\*\*\* The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

† Highest locational running annual average calculated quarterly.

‡ TT for TOCs is based on the lowest running annual average of the monthly ratios of the percent TOC removal achieved to the percent TOC removal required. A minimum ratio of 1.00 is required to meet the TT.

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.



# Lead and Copper Parameters

	Lead	Copper
	Fort Thomas, Memorial Parkway, and Taylor Mill	Fort Thomas, Memorial Parkway, and Taylor Mill
90th percentile levels	2.6 ppb	0.246 ppm
Number of Sites Above Action Level	0	0
Number of Allowable Sites Above Action Level	5	5
Action Level	15 ppb	1.3 ppm
MCLG	0 ppb	0 ppm
Typical Sources of Contaminant	Corrosion of household plumbing system; erosion of natural deposits	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives

Lead and copper compliance is met when 90% of the samples collected from worst case sites have lead and copper below the action level (AL). Data was collected in 2018.

# Additional Water Quality Parameters

(This data is not required by the EPA, but the additional information is provided as a service to our customers.)

2020	Fort Thomas System			Taylor Mill System			Memorial Parkway System		
	Average Level Detected	Range of Detections		Average Level Detected	Range of Detections		Average Level Detected	Range of Detections	
Parameter		Lowest	Highest		Lowest	Highest		Lowest	Highest
Alkalinity (mg/l)	67.7	46.8	85.0	75.4	57.0	91.4	73.2	49.0	91.8
Aluminum (mg/l)*	0.013	<0.01	0.030	0.020	<0.01	0.046	0.023	<0.01	0.063
Calcium (mg/l)	30.6	24.1	37.2	33.1	26.5	39.9	32.2	25.1	37.4
Chloride (mg/l)	26.8	14.1	34.9	25.4	8.0	34.1	26.9	14.6	33.0
Conductivity (uS/cm)	366	262	497	356	219	475	373	264	485
Hardness, Total (mg/l)	126	94	156	133	96	172	132	98	160
Hardness, Total (grains per gallon)	7.36	5.49	9.11	7.80	5.61	10.05	7.70	5.72	9.35
Iron (mg/l)**	<0.005	<0.005	0.015	0.015	<0.005	0.082	0.007	<0.005	0.033
Langelier Index***	-1.30	-1.68	-0.91	-1.27	-1.27	-1.27	-1.22	-1.66	-0.77
Manganese (mg/l)****	<0.001	<0.001	0.008	<0.001	<0.001	0.005	0.002	<0.001	0.010
Odor (threshold odor number)	5.0	4.0	6.0	2.0	2.0	2.0	3.7	1.4	6.0
Orthophosphate (mg/l)	0.084	0.049	0.150	0.136	0.070	0.176	0.122	0.075	0.171
pH (pH units)	7.29	7.00	7.59	7.21	7.01	7.49	7.33	6.80	7.66
Potassium (mg/l)	2.73	1.83	3.82	2.57	2.49	2.65	3.07	2.18	3.79
Sodium (mg/l)	25.8	14.4	34.8	24.7	7.09	35.9	25.2	16.8	32.0
Sulfate (mg/l)	54.5	15.3	87.6	50.2	14.8	85.7	51.8	29.8	77.9
Temperature (degrees Celsius, °C)	17.5	5.2	28.7	21.2	12.4	27.1	19.0	8.50	30.3
Temperature (degrees Fahrenheit, °F)	63.5	41.4	83.7	70.1	54.3	80.8	66.2	47.3	86.5
Total Dissolved Solids (mg/l)	198	138	272	199	111	277	205	141	294

\* <0.01 indicates the result was below the minimum reporting limit of 0.01 mg/l.

\*\* <0.005 indicates the result was below the minimum reporting limit of 0.005 mg/l.

\*\*\* Langelier Index is an index reflecting the equilibrium pH of water with respect to calcium and alkalinity. The value is used as an indicator to determine if the water is stabilized to control both corrosion and scale deposit.

\*\*\*\* <0.001 indicates the result was below the minimum reporting limit of 0.001 mg/l.

# Unregulated Contaminants Monitoring Rule (UCMR4)

The 1996 Safe Drinking Water Act Amendments required the EPA to publish a list of unregulated contaminants that are to be monitored. From this monitoring the EPA will decide if a contaminant will be added to the list of contaminants for possible new drinking water standards. The UCMR4 contains the new list of contaminants that the public water systems are required to monitor. NKWD has sampled for this series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants 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 Water Quality Lab at 859-441-0482. NKWD completed the monitoring requirements of the UCMR4 in 2020. The UCMR4 monitoring program includes 30 contaminants. We had 24 of these that were not detected above the minimum reporting limit including: 1-butanol, 2-methoxyethanol, 2-propen-1-ol, alpha-hexachlorocyclohexane, butylated hydroxyanisole, chlorpyrifos, dimethipin, ethoprop, germanium, manganese, o-toluidine, oxyfluorfen, profenofos, quinoline, tebuconazole, total permethrin, tribufos, anatoxin-a, cylindrospermopsin, and total microcystin. Please refer to the chart below regarding the data from the UCMR4 monitoring for the contaminants that were detected.

	Unregulated Contaminants (UCMR4)	Average (ppb)	Range (ppb)	Date
<b>Fort Thomas Treatment Plant</b>				
<b>Untreated Source Water</b>	Bromide	35.0	23.3 to 53.1	11/2018 – 8/2019
	Total Organic Carbon	2823	2200 to 3400	11/2018 – 8/2019
<b>Finished Water</b>	Manganese	0.16	ND to 0.624	11/2018 – 8/2019
<b>Taylor Mill Treatment Plant</b>				
<b>Untreated Source Water</b>	Bromide	10.80	ND to 22.4	11/2018 – 8/2019
	Total Organic Carbon	3668	1690 to 5950	11/2018 – 8/2019
<b>Finished Water</b>	Manganese	3.37	ND to 12.4	11/2018 – 8/2019
<b>Memorial Parkway Treatment Plant</b>				
<b>Untreated Source Water</b>	Bromide	37.55	23.3 to 51.8	5/2019 – 8/2019
	Total Organic Carbon	3250	3120 to 3380	5/2019 – 8/2019
<b>Finished Water</b>	Manganese	0.38	ND to 0.763	5/2019 – 8/2019
<b>Distribution System</b>				
	HAA5	5.57	1.63 to 15.38	11/2018 – 8/2019
	HAA6Br	4.92	1.74 to 11.13	11/2018 – 8/2019
	HAA9	9.78	3.37 to 22.97	11/2018 – 8/2019

EPA has not established drinking water standards for unregulated contaminants. There are no MCLs and therefore no violations if found. The treatment plant and distribution system sampling protocol was determined by the UCMR4 regulation requirements and the Kentucky Division of Water.



# Emerging Compounds

An “emerging compound” is a chemical or material that is characterized by a perceived, potential, or real threat to human health or the environment or by a lack of published health standards. A compound may also be “emerging” because a new source or a new pathway to humans has been discovered, or a new detection method or treatment technology has been developed. EPA maintains a list of emerging compounds in the drinking water that may warrant further possible study and regulation. There is an established process in place within the appropriate federal agencies to provide further guidance to water utilities on testing and treating for emerging compounds. The UCMR4 monitoring program discussed on the previous page is EPA’s method for addressing emerging compounds. Some of these compounds include pesticides, metals, alcohols, haloacetic acids and cyanotoxins. NKWD provides advanced treatment processes as part of a multi-barrier approach that is effective in treating broad categories of compounds. Please see our website at [www.nkywater.org](http://www.nkywater.org) for more information on emerging compounds including per- and polyfluoroalkyl substances (PFAS).

## Protect Our Water Resources!

Recent research shows that pharmaceutical compounds exist in our environment both as a result of improper disposal of unused pharmaceuticals and because they are excreted by the person using the medication. When used as intended, pharmaceuticals applied externally or ingested have the potential to be excreted or washed into sewage systems. In addition, unused pharmaceuticals are often directly flushed into sewage systems. Wastewater treatment plants and septic systems usually do not treat or only partially treat pharmaceuticals, so chemical compounds from pharmaceuticals pass through treatment plants or septic systems to our rivers or groundwater.

Unused prescription medications are bad for the environment and for drug abuse. Do not flush unused medication down drains or toilets. Use area take-back programs to keep our waters clean and prevent drug abuse.

Dispose of your expired or unused prescription medications at a local pharmaceutical collection box near you. Drug disposal is anonymous and items can be dropped off during regular business hours. Bring prescription medication to the pharmaceutical dropoff locations in its original packaging.



A proud member of Kentucky Excel. The program is free and members voluntarily undertake projects that enhance and protect Kentucky's environment.

## Pharmaceutical Dropoff Locations

Campbell County Police Department  
Covington Police Department  
Dayton Police Department  
Edgewood Police Department  
Erlanger Police Department  
Fort Thomas Police Department  
Fort Wright Police Department  
Highland Heights Police Department

Kenton County Police Department  
Newport Police Department  
Park Hills Police Department  
Southgate Police Department  
Villa Hills Police Department  
Wilder Police Department  
Kentucky State Police



# Northern Kentucky Water District

## Customer Service

### Regular Business Hours:

Monday – Friday, 8:00 a.m. – 5:00 p.m.

### General Customer Service:

(859) 578-9898

### After Hours Emergency Shut-Off:

(513) 244-9016

### Billing Inquiries:

(859) 578-9898

### Public Service Commission Hotline:

1-800-772-4636

### Water Quality Questions/Concerns:

(859) 441-0482

### U.S. EPA Safe Drinking Water Hotline:

1-800-426-4791

### Additional Drinking Water Quality Reports:

(859) 441-0482

### Questions About This Report:

Mary Carol Wagner, (859) 441-0482

## Bill Payments

### Online:

<http://www.nkywater.org/payyourbill.html>

### By Phone (Visa/MasterCard/Discover):

(859) 578-9898

### In Person:

2835 Crescent Springs Road, Erlanger, KY 41018  
Most area banks

### Drop Boxes:

2835 Crescent Springs Road, Erlanger, KY 41018  
Campbell County Library, Cold Spring, KY 41076  
1045 Eaton Drive, Fort Wright, KY 41017  
5225 Taylor Mill Road, Taylor Mill, KY 41015

### By Mail:

P.O. Box 18640, Erlanger, KY 41018

### Correspondence:

P.O. Box 18640, Erlanger, KY 41018

### Pre-Authorized Payment:

Contact our office to have your payment automatically deducted from your savings account, checking account or credit card.



## Board of Commission Meetings

- 3rd Thursday of each month  
at 12:00 p.m.  
(subject to change)
- 2835 Crescent Springs Road  
Erlanger, KY 41018

[www.nkywater.org](http://www.nkywater.org)

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

(This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)