

Water Source Information

Northern Kentucky Water District is the largest water district and the third largest water utility in the state of Kentucky serving 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 safe, clean and sufficient water supplies through a reliable system at a reasonable cost to meet the needs of current and future customers. Customers and water quality come first at Northern Kentucky Water District.

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

Drinking Water Regulations

NKWD drinking water meets all of the Environmental Protection Agency's (EPA) health standards. Our lab analysts gather water samples from over 170 locations each month. This is far more than federal and state regulations require, but 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 2008.

The surface water sources of raw water 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 non-point source contaminants. Bridges, railroads, ports, waste handlers or generators, and Tier II hazardous chemical users in the area introduce the potential for spills or leaks of hazardous materials. 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 line rights-of-way with potential herbicide use, and residential septic systems located throughout the watershed. Since the intake is in an urban area, the threat of underground storage tanks leaking must also be taken into account. The entire report is available at Northern Kentucky Area Development District, 22 Spiral Drive, Florence, KY 41042. Phone: 859-283-1885.



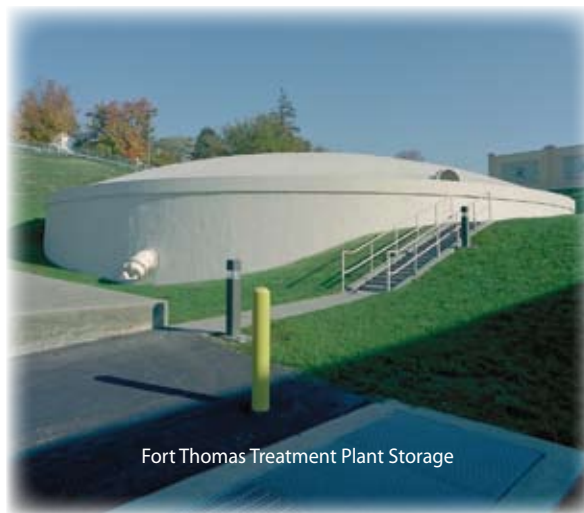
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Ohio River Pump Station



Fort Thomas Treatment Plant



Fort Thomas Treatment Plant Storage

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, U.S. EPA prescribes regulations that 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 that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants.** Examples include salts and metals, that can be naturally occurring or result from urban storm water 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 storm water runoff and residential uses.
- **Organic Chemical Contaminants.** These include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive Contaminants.** These can be naturally occurring or be the result of oil and gas production and mining activities.

Total Trihalomethanes (TTHM). The current MCL for TTHM is 80 ppb. Although the TTHM annual average in our water is below the MCL, it has been detected at a few sample locations above the MCL. We are including the following health effects language. Some people who drink water containing TTHM in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Stage 2 Disinfectants and Disinfection By Products 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 by products. TTHM and Total Haloacetic Acid (THAA) are disinfection by products that we need to monitor. The DBPR is an EPA Federal Regulation that is looking at levels of TTHM and THAA in the water. The DBPR requires water systems to conduct an Initial Distribution System Evaluation (IDSE). The IDSE is a one-time study conducted by the water systems to identify distribution system locations with high concentrations of TTHM and THAA. Water systems will use the results from the IDSE along with the current compliance locations to select more representative compliance locations to comply with the Stage 2 DBPR. NKWD completed the IDSE monitoring between December of 2006 and October of 2007. The range of the monitoring results for the TTHM was 5.15 - 163 ppb. The range of the monitoring results for the THAA was 17.83 - 79.04 ppb.



Aqua Drive Tank

Board of Commission Meetings

- 3rd Thursday of each month at 12:30 p.m. (subject to change)
- 2835 Crescent Springs Road, Erlanger, KY 41018

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.)

www.nkywater.org

Customer Service

Regular Business Hours

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

Billing Questions/Service Turned On or Off:

(859) 578-9898

Additional Drinking Water Quality Reports:

(859) 441-0482

Public Service Commission Hotline:

1-800-772-4636

After Hours Emergency Shut-Off:

(513) 244-9016

Bottling Requests:

(859) 578-9898

U.S. EPA Safe Drinking Water Hotline:

1-800-426-4791

Questions About This Report:

Mary Carol Wagner, (859) 441-0482

Bill Payments

By Phone (Visa/MasterCard/Discover):

(859) 578-9898

In Person:

2835 Crescent Springs Road, Erlanger, KY
Most area banks

Drop Boxes:

2835 Crescent Springs Road, Erlanger, KY

Aqua Drive, Cold Spring, KY

1045 Eaton Drive, Fort Wright, KY

5225 Taylor Mill Road, Taylor Mill, KY

By Mail:

P.O. Box 188190, Erlanger, KY 41018

Correspondence:

P.O. Box 188190, Erlanger, KY 41018

Pre-Authorized Payment:

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

2008 Water Quality Report

Northern Kentucky
Water District

PWSID# KY0590220

Water Quality Data 2008

Contaminant (units)	Fort Thomas System				Taylor Mill System				Memorial Parkway System				MCL	MCLG	Violation Yes/No	Typical Sources of Contaminant
	Average Level Detected	Range of Detections		Highest Annual Average	Average Level Detected	Range of Detections		Highest Annual Average	Average Level Detected	Range of Detections		Highest Annual Average				
Barium (ppm)	0.030	0.030	0.030	0.030	0.014	0.014	0.014	0.014	0.025	0.025	0.025	0.025	2	2	No	Erosion of natural deposits; discharge of drilling wastes; and discharge from metal refineries
Chlorine (ppm)	1.41	1.16	1.66	1.44	1.41	1.16	1.66	1.44	1.41	1.16	1.66	1.44	4 (MRDL)	4 (MRDLG)	No	Water additive used to control microbes
Fluoride (ppm)	1.04	0.87	1.22	-	1.05	0.73	1.27	-	1.05	0.87	1.27	-	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	0.623	0.548	0.699	-	0.230	0.121	0.340	-	0.555	0.515	0.595	-	10	10	No	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks; sewage
Turbidity (ntu)	0.06	0.03	0.23	100%*	0.08	0.03	0.19	100%*	0.05	0.03	0.14	100%*	TT*	N/A	No	Soil runoff
Beta/ Photon emitters (pCi/l)** Data collected in 2007	3.3	2.8	4.3	-	2.9	1.8	4.0	-	3.8	1.4	7.7	-	50	0	No	Decay of natural and man-made deposits
Alpha emitters (pCi/l) Data collected in 2007	0.3	0	0.7	-	0.3	0	0.7	-	0.5	0	0.8	-	15	0	No	Erosion of natural deposits
Combined Radium (pCi/l) Reported as Radium 226 Data collected in 2007	0.1	0	0.2	-	0.1	0	0.2	-	0.1	0	0.1	-	5	0	No	Erosion of natural deposits
Uranium (pCi/l) Data collected in 2007	0.1	0	0.3	-	0.3	0	0.5	-	0.1	0	0.2	-	30	0	No	Erosion of natural deposits
THAAS [total haloacetic acid 5] (ppb)	37	20	80	39†	37	20	80	39†	37	20	80	39†	60	N/A	No	By-product of drinking water disinfection
TTHM [total trihalomethanes] (ppb)	59	14	145	62†	59	14	145	62†	59	14	145	62†	80	N/A	No	By-product of drinking water chlorination
TOC [total organic carbon] (ppm) measured as ppm, but reported as a ratio.	1.29	1.00	2.64	1.29‡	2.26	1.13	3.86	2.03‡	1.33	1.00	1.87	1.14‡	TT‡	N/A	No	Naturally present in the environment

* 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 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.

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.
NTU = Nephelometric turbidity units
mrem/yr = Millirems per year.
pCi/l = Picocuries per liter.
Range of Detection = This is 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 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

	Lead	Copper
	Fort Thomas, Memorial Parkway, & Taylor Mill	Fort Thomas, Memorial Parkway, & Taylor Mill
90th percentile levels	.003 ppb	0.268 ppm
Number of Sites Above AL	0	0
Number of Allowable Sites Above AL	5	5
AL	15ppb	1.3ppm
MCLG	0ppb	0ppm
Typical Sources of Contaminant	Corrosion of household plumbing system; erosion of natural deposits	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservations

Lead and copper compliance is met when 90% of the samples were collected from worst case sites have lead and copper below the action level (AL).
 Data collected in 2006.

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 out of the United States), swimming pools, recreational water, day care centers, pets and nursing homes are common sources.

Crypto is a protozoan parasite that can live in the intestines of humans and animals and can cause the disease cryptosporidiosis. NKWD tests the Ohio and Licking Rivers for crypto on a monthly basis. In 2006, there were two months in which crypto was found in the Ohio River and four months in which it was found in the Licking River. The Ohio River occurrences averaged 0.09 per liter while the Licking River occurrences averaged 0.17 per liter. In 2007 and 2008, there was only one month of each year that crypto was found. This occurrence was in the Licking River. No occurrences were found in the drinking water. NKWD's testing and treatment standards of the water supply go far beyond the testing required by the EPA. Our treatment standards are much higher than those required by law and are continuously being improved. For example, our drinking water turbidity is 100 times better than the standard set by the EPA.

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 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 <http://www.epa.gov/safewater/lead>.

Important Information About Your Drinking Water

NKWD received one notice of Compliance Determination over the past year. Even though it was a reporting error by our contract lab and not a water quality issue, we want you to know what happened and what we did 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 the compliance period of 04/01/2008 -06/30/2008 our contract laboratory did not get one of the sample results to the Division of Water within the required time frame.

We were required to collect one sample for the contaminant Pentachlorophenol during the compliance period of 04/01/2008 - 06/20/2008 from our Fort Thomas Treatment Plant. We collected this sample within the proper time period on 6/4/2008 and submitted it to our contract lab for analysis. The lab analyzed the sample within the proper time but did not report the results to us in time to submit the results to the Division of Water within the time frame. Pentachlorophenol was not detected in the sample. We now require the contract lab to mail the reports to us in a timely manner, to notify us electronically when the reports are mailed, and to also send us an electronic copy of the reports as soon as they are complete. These actions will help prevent this type of error on the part of the contract lab in the future.

Please share this information with all the others, 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.



Service Area



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

Unregulated Contaminants Monitoring Rule (UCMR)

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 the contaminant will be added to the list of contaminants for possible new drinking water standards. The UCMR contains the new list of contaminants that the public water systems are required to monitor. NKWD completed the monitoring requirements of the UCMR in 2002. There were no detections for any of the new contaminants required. Results are available upon request. For more information please call 859-578-9898 .

