

Kentucky American Water

2007 Consumer Confidence Report - Ford Hampton Area

(PWSID KY0340250)

Kentucky American Water, 2300 Richmond Road, Lexington, KY 40502

President's Message

Quality Water for Quality Life

You are our top priority. Delivering reliable, high-quality water to you all day, every day is our mission. We deliver a total of approximately 43 million gallons of water a day to our communities for less than a penny per gallon.

Each year, Kentucky American Water publishes reports on the quality of your drinking water. We are pleased to report that investment in our water treatment plants and equipment as well as the expertise and dedication of our employees allows us to deliver drinking water that meets state and federal drinking water requirements. In addition to ensuring we are following current standards, we work closely with federal agencies to anticipate future water quality treatment requirements and regulations.

Your community is our community. We work with your local and state governments to make sure your water service needs are being met. From upgrading existing systems to developing new ones, from pitching in at local events like Reforest the Bluegrass and the Kentucky River Clean Sweep to sponsoring school programs, we are your neighbors and take your water quality personally.

We encourage you to review this report either in this printed form or on our Web site at www.kentuckyamwater.com. If you ever have any questions, please reach out to our customer service representatives at (800) 678-6301, 24 hours a day, seven days a week. After all, you are our first priority.

Nick O. Rowe



President,
Kentucky American Water

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

About Kentucky American Water

Kentucky American Water is one of the state's largest water utilities, providing over 15 billion gallons of water to our communities each year. We help provide drinking water, wastewater, and fire services to approximately 496,000 people in communities across the state.

Kentucky American Water is a subsidiary of American Water. Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater service provider. With headquarters in Voorhees, N.J., the company employs nearly 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15.6 million people in 32 states and Ontario, Canada. At Kentucky American Water, and throughout all of American Water, we work hard every day to provide our customers with water they can enjoy and use with confidence.

What is a Water Quality Report?

To comply with state and U.S. Environmental Protection Agency (EPA) regulations, Kentucky American Water issues an annual report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and your awareness of the need to protect drinking water sources. In 2007, we conducted tests for hundreds of contaminants. Each of the tests showed that contaminant levels were below the levels allowed by both state and federal regulations. This report provides an overview of your water quality in 2007. It includes details about where your water comes from and what it contains.

If you have any health concerns relating to the information in this report, we encourage you to contact your health care provider. For more information about this report, or for any questions relating to your drinking water, please feel free to contact our Customer Service Center at (800) 678-6301, 24 hours a day, seven days a week.

Source Water Information

When it rains, water travels over the surface of the land or through the ground, dissolving naturally occurring minerals (possibly radioactive material) and picking up organic material from animals or humans. The water ends up in rivers, lakes, streams, ponds, reservoirs, springs, and wells, where it may be used as a source of supply for both drinking and bottled water. The following contaminants may be present in source water as a result of this process:

- **Microbial Contaminants**, such as viruses and bacteria from sewage, agricultural livestock operations or wildlife.
- **Inorganic Contaminants**, such as salts and metals that may occur naturally or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- **Organic Chemical Contaminants** (including synthetic and volatile organic chemicals), which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive Contaminants**, which may occur naturally or result from oil and gas production and mining activities.

All of the water for our customers in the Ford Hampton service area is provided by Winchester Municipal Utilities (WMU), Public Water System Identification Number - KY0250473. WMU's raw (untreated) water sources are the Kentucky River Pool 10, and the Carroll E. Ecton Reservoir which are surface water sources. Pool 10 of the Kentucky River is approximately 25 miles in length extending upriver between Clark and Madison counties from a lock and dam located at Fort Boonesboro. The Kentucky River supplied the majority of the water treated in 2007. The remainder was obtained from the Carroll E. Ecton Reservoir located near the WMU water treatment facilities on Water Works Road in southern Clark County.



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Special Health Information

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).

Protecting Your Water Source

The Kentucky Division of Water approved a Source Water Assessment and Protection Plan for WMU in 2003. An analysis of the susceptibility of the Winchester water supply to contamination indicates that this susceptibility is generally moderate, but there are a few areas of high concern. Several highway bridges, a segment of railroad, areas of row crops, three active Superfund Sites, three solid waste generators and/or transporters, and impaired streams occur in the immediate area of Winchester's Kentucky River intake. An accidental release of toxic materials from a bridge or railroad could pose an immediate threat to Winchester's Kentucky River intake. There are numerous permitted operations and activities and other potential contaminant sources of moderate concern within the watershed that cumulatively increase the potential for the release of contaminants within the area. These potential contaminant sources include everything from large capacity septic systems, to major roads, to underground storage tanks, to Tier II hazardous chemical users. A copy of the completed source Water Assessment and Protection Plan may be viewed by calling the Watershed Management Branch of the Kentucky Division of Water at (502) 564-3410. Kentucky American Water encourages you to take an active part in protecting your water supply by participating in activities as they occur in your area.

Substances Expected to be in Drinking 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 (EPA) Safe Drinking Water Hotline at (800-426-4791). To ensure tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain substances in water provided by public water systems. The U.S. Food and Drug Administration (FDA) establish limits for contaminants in bottled water that must provide the same protection for public health. Winchester Municipal Utilities has a single water treatment plant located on Water Works Road in Clark County. Its treatment processes are designed to reduce contaminant concentrations and to provide maximum protection against microbial and viral pathogens that can be naturally present in surface waters.

Information on the Internet

The U.S. EPA and Centers for Disease Control Web sites provide a substantial amount of information relating to water sources, water conservation and public health. The Kentucky Division of Water Drinking Water Branch has a Web site that contains useful information as well. Visit these sites at the addresses below:

- **United States Environmental Protection Agency:** www.epa.gov/safewater
- **Centers for Disease Control and Prevention:** www.cdc.gov
- **Kentucky Division of Water:** www.water.ky.gov/

You Can Be Involved in Matters that Affect Your Water

Kentucky American Water welcomes your comments and questions regarding water quality issues. You can contact us with questions about your water and obtain additional copies of this report by calling our customer service center at (800) 678-6301. Alternatively, you may find additional information by visiting our Web site at www.kentuckyamwater.com.

Water Quality Data

We are pleased to report that during the past year, the water delivered to your home or business complied with, or exceeded, all state and federal drinking water standards. For additional information concerning our results, please contact our Customer Service Center at (800) 678-6301. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency, we believe it is important that you know exactly what was detected and how much of the substance was present in the water. Monitoring was also performed during 2002 under the U.S. Environmental Protection Agency (EPA) Unregulated Contaminant Monitoring Rule (UCMR). No compounds were detected. Data is available on the EPA's website, www.epa.gov/safe-water/data/ucmrgetdata.html.

Definitions of Terms Used in This Report

- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.
- **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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of 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 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.
- **NA:** Not applicable
- **ND:** Not detected
- **NTU (Nephelometric Turbidity Unit):** Measurement of the clarity, or turbidity, of the water.
- **pH:** A measurement of acidity, 7.0 being neutral
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

A Proud Master Member of the Kentucky EXCEL Program

The Kentucky Department for Environmental Protection administers a voluntary program for anyone who wishes to improve and protect Kentucky's environment beyond regulatory requirements. There are four membership levels available to program participants: Advocate, Partner, Leader and Master. The Master membership is the highest level, requiring members to demonstrate comprehensive environmental management planning; undergo an independent, third-party assessment of compliance; and commit to complete and report on at least four voluntary projects that will benefit Kentucky's environment. Kentucky American Water is proud to participate in this program at the Master level.



How to Read This Table

Kentucky American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2007, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the “Definitions of Terms Used in This Report.” Start by finding a **Substance**, and then read across to find the information about that substance. The **Year Sampled** is usually in 2007 or the prior year. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **Highest Value** (Results) represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements. **Typical Source** tells where the substance usually originates.

Regulated Substances (Measured by Winchester Municipal Utilities, KY0250473, on Water Leaving the Treatment Facility)								
Substance (units)	Year Sampled	MCL	MCLG	Winchester Municipal Utilities		Compliance Achieved	Typical Source	
				Highest Value	Range			
					Low - High			
Alpha emitters (pCi/l)	2002	15	0	1	ND – 1.1	Yes	Erosion of natural deposits.	
Barium (ppm)	2007	2	2	0.024	NA	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	
Combined Radium (pCi/L)	2002	5	0	0.8	0.7 – 0.8	Yes	Erosion of natural deposits.	
Fluoride (ppm)	2007	4	4	1.4	0.84 – 1.4	Yes	Water additive that promotes strong teeth;	
Nitrate (ppm)	2007	10	10	0.44	NA	Yes	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.	
Total Organic Carbon ¹ , (ppm)	2007	TT	NA	1.33	0.86 – 2.28	Yes	Naturally present in the environment.	
Turbidity ² , NTU	2007	TT	NA	0.55	99% monthly lowest	Yes	Soil runoff.	
Regulated Substances (Trihalomethanes and Haloacetic Acids are measured in the Distribution System by Winchester Municipal Utilities, KY0250473. Chlorine is measured in the Distribution System by Kentucky American Water, KY0340250)								
Substance (units)	Year Sampled	MCL	MCLG	Highest RAA	Range Low -High	Compliance Achieved	Typical Source	
Total Trihalomethanes ³ (ppb)	2007	80	NA	48	19 – 118	Yes	By-product of drinking water disinfection.	
Haloacetic Acids ³ (ppb)	2007	60	NA	43	20 – 79	Yes	By-product of drinking water disinfection.	
Chlorine (ppm)	2007	MRDL = 4	MRDLG = 4	1.06	0.4 – 2.0	Yes	Water additive used to control microbes.	
Bacterial Results (Measured in the Distribution System by Kentucky American Water, KY0340250)								
Substance (units)	Year Sampled	Action Level	MCLG	90 th Percentile	Number of Samples	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Lead ⁴ (ppb)	2006	15	0	ND	50	0	Yes	Corrosion of household plumbing systems;
Copper ⁴ (ppm)	2006	1.3	1.3	0.16	50	0	Yes	Corrosion of household plumbing systems;
Regulated Substances (Measured at the Customer's Tap by Kentucky American Water, KY0340250)								
Substance (units)	Year Sampled	MCL	MCLG	Highest Percentage Detected		Compliance Achieved	Typical Source	
Total Coliform	2007	5% Positive	NA	2		Yes	Naturally present in the environment.	
<p>¹ Total Organic Carbon: Although the concentration is listed as ppm, the values shown are ratios that are used to determine compliance. Compliance with the TOC Treatment Technique (TT) requirement is based on the lowest running annual average (RAA) of the monthly ratios of the % TOC treatment removal achieved compared to the required removal. A minimum annual average ratio of 1.00 is required. Total organic carbon data are from Winchester Municipal Utilities. The number reported in the Highest Value column is actually the lowest RAA, calculated quarterly, for the year.</p> <p>² Turbidity: Turbidity is the clarity of water. It is measured as an indicator of water quality and the effectiveness of the filtration system. Compliance with the turbidity Treatment Technique (TT) is achieved when 95% of four-hour filtered water readings are 0.3 NTU or lower and no readings are greater than 1 NTU. Turbidity data are from samples collected by Winchester Municipal Utilities.</p> <p>³ Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAAs): Compliance is based on a RAA that is calculated quarterly. The highest quarterly RAA is the measured value in the table. Trihalomethane and Haloacetic Acid data is from samples collected by Winchester Municipal Utilities.</p> <p>⁴ Lead and Copper: Compliance is achieved when at least 90% of samples collected from water standing in contact with plumbing for at least 6 hours are below the Action Level. Lead and copper results are from samples collected by Kentucky American Water.</p>								

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. People with severely weakened immune systems have a risk of developing life threatening illness. We encourage such individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. The EPA issued a new rule in January 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment. In anticipation of this upcoming rule, WMU already has conducted 12 consecutive months of monitoring for Cryptosporidium in their raw water sources. They detected a very small amount of the organism in the Kentucky River one time during this testing. Based on the results of their Cryptosporidium monitoring to date, no additional treatment will be required by the new EPA regulation.

Special Information About Lead in Drinking Water

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. Kentucky American Water 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>. Kentucky American Water remains in full compliance with all of the requirements pertinent to lead and copper in drinking water.