



Hartford Municipal Water Works

Water Quality Report for year 2014

116 E. Washington Street
Hartford, KY 42347

KY0920181

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Meeting Dates and Time: The fourth Thursday of each month 4:00 PM

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Water - Essential for Life

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

Our water source is surface water drawn from Rough River. Rough River is classified as surface water. We treat water at our own facility. The final source water assessment with a summary of the system's susceptibility to potential sources of contamination has been completed. Areas of high concern at the intake consist of row crops, a bridge and culvert site. Although there are areas of high concern, an analysis of the susceptibility of the water supply to contamination indicates that the overall susceptibility is generally moderate. That assessment is available for inspection at Green River Area Development District (270) 926-4433, located 3860 U.S. Highway 60 West, Owensboro, Ky. 42301-0200. It can also be obtained from City Hall (270) 298-3101, 116 E. Washington St. Hartford, KY. 42347. If there are any questions or concerns relative to this source water assessment they are to be directed to Caroline Gray at (270) 298-3101.

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).

Some or all of these definitions may be found in this report:

Information About Lead:

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.

Variations & 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.

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>.

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.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source		
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% of monthly samples	0.14	100	No	Soil runoff		
Regulated Contaminant Test Results							
Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants							
Combined radium (pCi/L)	5	0	1.5	1.5 to 1.5	2014	No	Erosion of natural deposits
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.026	0.026 to 0.026	2014	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	0.1	0.1 to 0.1	2014	No	Water additive which promotes strong teeth
Copper [1022] (ppm) sites exceeding action level 0	AL = 15	0	0.105 (90 th percentile)	0.013 to 0.119	Sept-12	No	Corrosion of household plumbing systems
Nitrate [1040] (ppm)	10	10	0.6	0.6 to 0.6	2014	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
2,4-D [2105] (ppb)	70	70	0.6	0.6 to 0.6	2014	No	Runoff from herbicide used on row crops
Atrazine [2050] (ppb)	3	3	1	0 to 2	2014	No	Runoff from herbicide used on row crops
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)	TT*	N/A	1.34 (lowest average)	0.71 to 2.07 (monthly ratios)	N/A	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	1.15 (highest average)	0.33 to 2.15	N/A	No	Water additive used to control microbes.
HAA (ppb) (Stage 1) [Haloacetic acids]	60	N/A	62 (system average)	45 to 78 (range of system sites)	N/A	YES	Byproduct of drinking water disinfection
HAA (ppb) (Stage 2) [Haloacetic acids] (Individual Sites)	60	N/A	50 * (high site average)	45 to 50 (range of individual sites)	2014	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 1) [total trihalomethanes]	80	N/A	69 (system average)	36 to 99 (range of system sites)	N/A	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes] (Individual Sites)	80	N/A	67 * (high site average)	55 to 67 (range of individual sites)	2014	No	Byproduct of drinking water disinfection.

* We started Stage 2 samples in the last quarter of 2014. There is no average available for this period in time.

During the compliance period of 01/01/14 - 03/31/14 we exceeded the mcl for HAA5 (Haloacetic acids) . The reported results for the fourth quarter was .062mg/l. These results exceeded the mcl of .060. Remedial or coorrective action included performing public notification and the required certification.

Haloacetic acids, or HAA. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

In 2014 we received a Notice of Violation (NOV) from our primacy agency, KY Division of Water. Our system failed to prepare and submit to the Department of Environmental Protection a certification of the distribution of the report that conforms to the requirements of 401 KAR 8:075 for the calender year. See "Comments" below for details specifying the nature of the violation. As part of the Consumer Confidence Report (CCR) this work should have been completed. There were no health effects due to this adminstraive oversight. Remedial or corrective action included detailing this NOV on the 2014 CCR.

Comments: The lead 90th percentile were reported incorrectly. The 90th percentile was less than .002 which equals a non-detect/zero.

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.

What happened? Who is at risk? What is being done?

During compliance periods of 03/13/14-12/31/14, 10/08/14-12/31/14 & 10/18/13-12/31/14 our system recieved a Notice of Violation (NOV) from our primacy agency, KY Division of Water. We failed to submit Public Notice Certification for three NOV's. In addition we did not meet distribution requirements for Public Notice. The public notice was put in the newspaper and that was incorrect. The public notices should have been direct delivered. Remedial actions included submitting proof of public notification & certification and performing public notification and the required certification.

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.

In 2014 we received a Notive of Violation (NOV). We neglected to perform Public Notification (PN) within a year time frome. This PN was for a November 2012 Chlorine Vilolation. There were no health effects due to this oversight. Remedial actions included detaing this NOV in the 2014 Consumer Confidence Report.