



City of Hartford
19 West Main,
Hartford, MI 49057

2016 Annual Quality Water Report For The City of Hartford

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of water that we supply to you every day. Included are details about where the water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is from a natural glacial formation, which is pumped from beneath the ground and delivered to you from ground water wells. This report shows our water quality and what it means.

Your water comes from three municipal wells. The city's three municipal wells and a Iron Removal Plant serve the system. The water supply is treated with fluoride to prevent tooth decay, phosphates for corrosion control and rust control, and chlorine for water disinfection.

Our City Board of Commissioners meets on the third and fourth Monday of every month at 7:30 PM in City Hall, at 19 West Main Street. If you have any questions about this report or concerning your water utility, please contact Dan Staunton of the Public Works Department, at (269)-621-3022. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, 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.

The sources of drinking water (both tap 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.

Your water comes from two groundwater wells located at the Northeast corner of the City that are 130 some feet deep drawing from the Paw Paw River aquifer. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from “very low” to “high” based primarily on geologic sensitivity, water chemistry and contaminate sources. The susceptibility of our source is High. Sources of contaminations that may be present are listed below. We are making efforts to protect our sources through the Well Head Protection Program, the source water assessment report. If you would like to know more about these reports, please contact Hartford City Hall 19 W. Main St. Hartford Michigan 49057

Or call 269-621-2477 and you can find this report on our web site www.cityofhartfordmi.org.

Contaminants that may be present in source water include:

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 City of Hartford 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 up 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 at <http://www.epa.gov/safewater/lead> or you can call 1-800-426-4791.

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as 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, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, Including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The table below lists all the drinking water contaminants that we detected. The detected concentration can be either below or above the safe drinking water standard (also known as the Maximum Contamination Level). If the detected concentration is above the safe drinking water standard, a violation has occurred and a "YES" in bold will be indicated in the violation column. EPA requires that water suppliers report the most recent sampling results within a five-year period from 2002 to 2007. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Terms and Abbreviations

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - (mandatory language) The "Maximum Allowed" (MCL) is 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 - (mandatory language) The "Goal" (MCLG) is 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

MRDLG: Maximum Residual Disinfectant Level Goal

Regulated Monitoring

Contaminants (units)	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violations	Typical Source of Contaminant
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.7	0.2-1.0	3-28-16	No	Water treatment using fluoride.
Arsenic (ppb)	10*	0*	0	ND-10	12-14-12	No	Erosion of natural deposits.
Barium (ppm)	2	2	0.19	0.11-0.19	12-14-12	No	Erosion of natural deposits.
Total Trihalomethanes (ppb)	80	N/A	.0096	18.2-23.9	8-2-16	No	Byproducts of chlorination.
Total Haloacetic Acids (ppb)	60	N/A	.011	N/A	8-2-16	No	Byproducts of chlorination
Radionuclides							
Combined radium (pCi/l)	5	0	0.63	ND - 3.3	7-30-13		

Contaminants (Units)	AL	MCLG	Our water	No. of sites found above the AL	Sample Date	Violations	Typical Source of Contaminant
Lead	15ppb	0	0*	0	7-13-16	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	1300ppb	1300ppb	199ppb*	0	7-13-16	No	Corrosion of household plumbing systems; erosion of natural deposits

*The our water column is the calculated 90th percentile of all lead and copper samples. This means that the results of 90 percent of samples are less than or equal to this level.

Special Monitoring							
Contaminants (Units)	MCL	MCLG	Our Water	Range of Detection's	Sample Date	Violations	Typical Source of Contaminant
Sodium (ppm)	N/A	N/A	22	12-23	3-28-16	N/A	Erosion of natural deposits

Effective January 23, 2006, water supplies must comply with the new arsenic maximum contaminate level (MCL) of 0.010 milligrams per liter, or 10 parts per billion (ppb). While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead and copper monitoring was completed for this monitoring schedule. And was successfully done with no violations.

The City of Hartford adds chlorine to your drinking water for disinfection purposes. Listed below is monthly averages for the last 12 months.

Year Covered by the CCR 2016												
Chlorine or Chloramines	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bacteriological sample site: 200 Beachwood Street	0.8	0.9	0.9	0.7	0.9	0.8	0.0	1.1	0.7	1.1	1.1	1.0
Bacteriological sample site: 525 E. Main Street	1.0	1.0	1.1	1.0	1.1	1.1	1.1	1.2	1.0	1.2	1.2	1.2
Bacteriological sample site: 19 W. Main Street	1.0	0.8	1.0	0.8	1.0	1.1	1.0	1.0	1.0	1.1	1.0	1.1
Average of all measurements taken in the month	0.9	1.0	1.0	0.8	1.0	1.1	1.0	1.1	0.9	1.1	1.1	1.1
RAA calculated quarterly of 12 monthly averages												

We are committed to providing you safe, reliable, and healthier water. We are pleased to provide you with this information to keep you fully informed about your water. We will be updating this report annually, and we will also keep you informed of any problems that may occur through out the year as they happen.

For more information about your water, the contents of this water quality report and the source water assessment report contact Dan Staunton.

Special monitoring are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate those contaminants.

For more information about safe drinking water visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.