



Water Quality Report 2016

The Huron Water Division has a current, unconditional license to operate the water system in the City of Huron and we are proud to present our 2016 Water Quality Report. In complying with recent legislation, we have developed this report to provide you with valuable information concerning your drinking water. This report will emphasize the quality product that the City provides, and shows that your drinking water is and will continue to be safe.

Mark of Excellence

The City of Huron Water Division's goal has been to produce the safest and highest quality water for all of our customers. In implementing our goal we routinely collect and test water samples, from the water source right to your home. Our treatment plant is constantly maintained, evaluated and up-graded to stay abreast of advancements in technology and government regulations. Through foresight and planning, efficiency in operations, and focus on excellence in customer service, we will provide you the best quality drinking water at an economical price.

This report will answer three important questions:

- **Where does my water come from?**
- **How is my water treated and purified?**
- **What is in my water?**

Also, we will provide you with information about available resources that will answer other questions on water quality and health effects.

Working Hard For You

Under the Safe Drinking Water Act (SDWA), the Environmental Protection Agency (EPA) is responsible for setting national limits on hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Similarly, F.D.A. regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Each water system continually monitors for these substances and reports directly to the EPA if they were detected in the drinking water. EPA uses this data to ensure that consumers are receiving clean water and to verify that states are enforcing the laws that regulate drinking water.

This publication conforms to the new federal regulations under SDWA requiring water utilities to provide detailed

Our water meets or exceeds the strict standards enforced by all state and federal agencies.

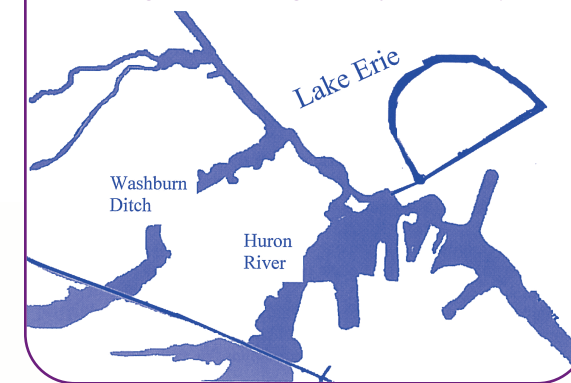


water quality information to each of its customers annually. The Huron Water Division is committed to providing you with this information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards. Protecting our drinking water is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the appropriate authorities. Only by working together can we insure a safe and adequate supply of water for future generations.

For information about this report, or for any questions relating to your drinking water, please call Jason Gibboney, Superintendent, Huron Water Division at **(419) 433-9502** or by email at jgibboney@cityofhuron.org.

Where Does My Water Come From?

The water provided by the City of Huron comes directly from Lake Erie. This is our sole source of water supply, and consumers use on an average two million gallons of water a day.



How Is My Water Treated And Purified?

The treatment process consists of a series of steps. First, raw water flows by gravity through a 36" concrete intake pipe from a submerged crib located approximately 2,200 feet out into Lake Erie. When the water enters the treatment plant it is held in the raw water wet well. From the wet well the water is pumped to the flash mix where ACH is added. The ACH causes small particles to adhere to one another (called floc) making them heavy enough to settle into a basin from which sediment is removed.

After settling, the water is then filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and the clear water emerges.

Finally, as a precaution against any bacteria that might remain, chlorine is added before the water flows to sanitized, underground storage reservoirs, water towers

and into your homes and businesses. We carefully monitor the amount of chlorine added, trying to provide the lowest quantity necessary to protect the safety of your water without compromising taste. Finally, fluoride is added to the water to help prevent cavities, and a PH balance is maintained by adding caustic soda (sodium hydroxide) to reduce corrosion.

Substances Expected To Be In My Drinking Water

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 presence of animals or from human activity.

Contaminants that may be present in source water include:

- 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 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 can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the results of oil and gas production and mining activities.

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.



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 from their health care providers. Center for Disease Control (CDC) and EPA guidelines on appropriate means to lessen the risk or infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

What Is In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with all state and federal requirements. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water during 2016. Although the substances below are under the Maximum Contaminant Limit (MCL) set by the U.S. EPA, and therefore not expected to cause any health risks, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

(PLEASE SEE TABLES TO THE RIGHT)

Lead In Drinking Water

Lead is a naturally-occurring element in our environment. Consequently, our water supply is expected to contain a small, undetectable amount of lead. However, most of the lead in household water usually comes from the plumbing in your home, not from the local water supply. 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 Huron 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 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>. Lead in



REGULATED SUBSTANCES

| INORGANIC CONTAMINANT | | | | | | | | |
|------------------------|-----|------|--------|----------|-------------|-----------|---|--|
| Substance (Unit) | MCL | MCLG | Date | Detected | Range | Violation | Typical Sources | Health Effects |
| Fluoride (PPM) | 4 | 4 | 8-9-16 | 1.30 | 0.83-1.30 | NO | Erosion of natural deposits, water additive which promotes strong teeth. | Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. |
| Nitrate (PPM) | 10 | 10 | 5-2-16 | 1.40 | 0.10-1.40 | NO | Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. | Infants below the age of 16 months drinking water in excess of the MCL could become seriously ill and if untreated, may die. Blue baby syndrome and shortness of breath. |
| Barium (PPM) | 2 | 2 | 2-1-16 | 0.016 | 0.016-0.016 | NO | Erosion of natural deposits. | Some people who drink water containing barium over the MCL could experience increase in blood pressure. |
| Chlorine (Total) (PPM) | 4 | 4 | 8-1-16 | 2.8 | 1.3-2.8 | NO | Water additive used to control microbes. | Drinking water in excess of the MRDL could experience irritating effects to the eyes and nose. Could also experience stomach discomfort. |

| ORGANIC CONTAMINANT | | | | | | | | |
|-------------------------------------|-----|------|--------|----------|-----------|-----------|--|---|
| Substance (Unit) | MCL | MCLG | Date | Detected | Range | Violation | Typical Sources | Health Effects |
| Chloroform (PPB) | NA | NA | 5-2-16 | 18.9 | 4.5-18.9 | NO | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |
| Bromodichloromethane (PPB) | NA | NA | 5-2-16 | 10.8 | 3.2-10.8 | NO | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |
| Dibromochloromethane (PPB) | NA | NA | 8-1-16 | 4.7 | 2.6-4.7 | NO | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |
| Trihalomethane, total (PPB) | 80 | NA | 5-2-16 | 33.3 | 10.3-33.3 | NO | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |
| Monochloroacetic Acid (PPB) | NA | NA | 5-2-16 | 2.1 | 2.0-2.1 | NO | By-product of drinking water chlorination. | People who drink water containing haloacetic acids in excess of the MCL, may have an increase risk of getting cancer. |
| Dichloroacetic Acid (PPB) | NA | NA | 5-2-16 | 8.2 | 1.8-8.2 | NO | By-product of drinking water chlorination. | People who drink water containing haloacetic acids in excess of the MCL, may have an increase risk of getting cancer. |
| Trichloroacetic Acid (PPB) | NA | NA | 5-2-16 | 8.4 | 1.7-8.4 | NO | By-product of drinking water chlorination. | People who drink water containing haloacetic acids in excess of the MCL, may have an increase risk of getting cancer. |
| Haloacetic Acids (Five total) (PPB) | 60 | NA | 5-2-16 | 18.7 | 6.0-18.7 | NO | By-product of drinking water chlorination. | People who drink water containing haloacetic acids in excess of the MCL, may have an increase risk of getting cancer. |
| Atrazine (PPB) | 3 | 3 | 4-4-16 | 0.07 | 0.07-0.07 | NO | Run-off of herbicide on crop row. | People who drink water containing atrazine in excess of the MCL, over many years experience cardiovascular or reproductive system difficulties. |

| IDES - STANDARD MONITORING SAMPLES | | | | | | | |
|-------------------------------------|-----|------|---------|----------|-----------|--|--|
| Substance (Unit) | MCL | MCLG | Date | Detected | Range | Typical Sources | Health Effects |
| Trihalomethane, total (PPB) | 80 | NA | 11-1-16 | 82.6 | 19.3-82.6 | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |
| Haloacetic Acids (five total) (PPB) | 60 | NA | 5-2-16 | 34.1 | 8.3-34.1 | By-product of drinking water chlorination. | People who drink water containing trihalomethanes in excess of the MCL, may have an increase risk of getting cancer. |

| MICROBIOLOGICAL CONTAMINANTS | | | | | | | Typical Sources |
|--|-----|-------|------------|----------|-----------|-----------|---------------------|
| Substance (Unit) | MCL | MCLG | Date | Detected | Range | Violation | |
| Turbidity (NTU) | .30 | <0.10 | 5-4-16 | .29 | 0.03-0.29 | NO | Soil run-off, Algae |
| Turbidity (% samples meeting standard monthly) | 95% | NA | Continuous | 100% | 99.9-100% | NO | Soil run-off, Algae |

| MICROBIOLOGICAL CONTAMINANTS | | | | | | Typical Sources |
|------------------------------|--------------|-------------------|------|---------------------|------------------------------------|---|
| Substance (Unit) | Action Level | Action Level Goal | Date | Amount Detected 90% | Number of sites above action level | Typical Sources |
| Lead (PPB) | 15 | 0 | | 3.1 | Sites above 1 out of 25 | Corrosion of household plumbing system; erosion of natural deposits. |
| Copper (PPM) | 1.3 | 1.3 | | 0.280 | 0 out of 25 | Corrosion of household plumbing system; erosion of natural deposits. Leaching from wood preservatives |

MONITORING PERIOD: 01-01-16 to 12-31-16

Table Definitions:

- 1. Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- 2. Maximum Contaminant Level Goals (MCLG): The level of the contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- 3. Parts Per Billion (PPB): One part per billion (or micrograms per liter) corresponds to on penny in \$10,000,000.
- 4. Parts Per Million (PPM): One part per million (or milligrams per liter) corresponds to on penny in \$10,000.
- 5. Nephelometry Turbidity Unit (NTU).
- 6. Action Level (AL): The concentration of contaminant which, if exceeded, triggers treatment or other requirements which, if exceeded, triggers treatment or other requirements which a water system must follow).
- 7. Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

NO VIOLATIONS REPORTED IN 2016

Schedule of City Council Meeting

You are invited to participate in our public forum and voice your concerns about your drinking water. The City of Huron Council meetings are held on the second and fourth Tuesday of the month at 6:30 p.m. at the City Municipal Building. Visit the City of Huron's website (www.cityofhuron.org) for more information. We also offer individual and group tours of the Huron Water Treatment Plant, which can be scheduled by calling (419) 433-9502. For more information contact Jason Gibboney, Superintendent, Huron Water Dept., 500 Cleveland Road West, Huron, Ohio 44839 or you can contact him via email at jgibboney@cityofhuron.org.

drinking water is a concern because young children, infants, and fetuses appear to be particularly vulnerable to lead poisoning. A dose that would have little effect on an adult can have a big effect on a small body. On average, it is estimated that lead in drinking water contributes between 10 and 20 percent of total lead exposure in young children. To reduce lead levels in your drinking water you should flush your cold water pipes by running the water until it becomes as cold as it will get; and use only water from the cold tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead.

How Will I Know If There Is A Problem With My Water?

If the amount of contaminant exceeds a predetermined safe level in your drinking water, (MCL, action level, etc.), the Huron Water Division will notify you by newspaper, radio, TV, internet or other means within 24 hours. With the notification you will be instructed on what appropriate actions you can take to protect your family's health.



Source Water Protection

The City of Huron public water system uses surface water drawn from an intake on Lake Erie. For the purposes of source water protection, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare. The City of Huron's drinking water source protection area contains potential contaminant sources such as municipal sewage treatment plants, industrial wastewater, home sewage disposal system discharges, combined sewer overflows, runoff from residential, agricultural and urban areas, oil and gas production and mining operations, as well as accidental releases and spills, especially from commercial shipping operations and recreational boating.

The City of Huron's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Huron's Drinking Water Source Assessment report, which can be obtained by calling Jason Gibboney at (419) 433-9502 or contact by email at jgibboney@cityofhuron.org.

Got Questions?
Call U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791

