2014 Water Quality Report for City of Eaton Rapids

This report covers the drinking water quality for the City of Eaton Rapids for the 2014 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2014. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from 5 groundwater wells located in the northern portion of the city. The Iron Removal Plant removes iron and chlorine is added for disinfection, fluoride for dental benefits and phosphate for corrosion control.

There are no significant sources of contamination included in our water supply. We are making efforts to protect our sources by participation in the DEQ approved Well head Protection Program and participation in DEQ Abandon Well Management Program.

If you would like to know more about the report please contact, Scott Poyer, Utility Director at 517-663-8118 ext. 8153 or by e-mail at spoyer@cityofeatonrapids.com

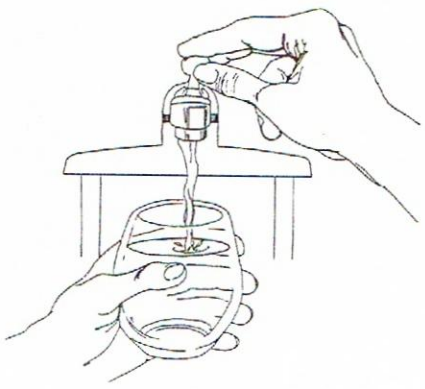
Contaminants and their presence in water: Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.

- **Vulnerability of sub-populations:** 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 systems 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).

- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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.

- Contaminants that may be present in source water include:
  - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
  - T **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.
  - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
  - T **Radioactive contaminants**, which are naturally occurring or are the result of oil and gas production and mining activities.
  - T **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 stormwater runoff, and septic systems.

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 regulations establish limits for contaminants in bottled water, which provide the same protection for public health.



Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2009/2014 calendar years. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1, 2009 – December 31, 2014. The State allows 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. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- 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 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.
- N/A: Not applicable ND: not detectable at testing limit ppb: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter pCi/l: picocuries per liter (a measure of radioactivity).
- Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- 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.

Regulated Contaminant	MCL	MCLG	Highest Level Detected	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Arsenic* (ppb)	10	0	ND		8-16-12	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.12ppb		7-15-09	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1.1mgl		8-25-14	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	.00016mgl		8-27-14	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	0.021mgl		6-13-14	No	Byproduct of drinking water disinfection
Chlorine	4	4	.36mgl	1.10-0.10	2014 avg.	No	Water additive used to control microbes

Special Monitoring and Unregulated Contaminant **	Average Level Detected	Range	Sample Date	Typical Source of Contaminant
Sodium (ppm)	19mgl		8-25-14	Erosion of natural deposits

Contaminant Subject to AL	Action Level	90% of Samples ≥ This Level		Sample Date	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0.001ppb	N/A	8-15-12	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.15 ppb	N/A	8-15-12	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

* These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is no MCLG.

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

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	0 positive monthly sample (5% of monthly samples positive)	0	0	No	Naturally present in the environment
Fecal Coliform and *E. coli*	Routine and repeat sample total coliform positive, and one is also fecal or *E. coli* positive	0	0	No	Human and animal fecal waste

If present, elevated levels of lead can cause serous 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 Eaton Rapids 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 at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

1 Partial Chemistry compounds are tested by collecting one sample and testing that sample for Nitrate and possibly Nitrite, Fluoride, Sodium and other parameters, depending on the laboratory used. Sampling for Nitrite, Fluoride and Sodium may be required less frequently than for Nitrate, but all these compounds may be tested for during a Partial Chemistry analysis.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Eaton Rapids City Hall, 200 S. Main St., or at our web site at www.cityofeatonrapids.com. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. City Council meeting are held the second and fourth Monday of every month at City Hall. For more information about your water, or the contents of this report, contact Scott Poyer, Utility Director at 517-663-8118 ext. 8153 or by e-mail at spoyer@cityofeatonrapids.com

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