2017 Water Quality Report for Eaton Rapids

This report covers the drinking water quality for City of Eaton Rapids for the 2017 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2017. 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 6 groundwater wells, each over 60ft. deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is "high" to "moderate".

There are no Significant sources of contamination include 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, Mark Lease, City Water Dept. at (517) 663-8118 ext. 8118 or by e-mail at mlease@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:

- 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 and residential uses.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 2017 calendar year. 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 – December 31, 2017. 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:

- <u>Maximum Contaminant Level Goal (MCLG)</u>. 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.
- <u>Maximum Contaminant Level (MCL)</u>: 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.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.
- <u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water.
- 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/I: picocuries per liter (a measure of radioactivity).
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements
 that a water system must follow.
- <u>Level 1 Assessment</u>: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- <u>Level 2 Assessment</u>: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Inorganic Contami	nants		* ×			\	
Barium (ppm)	2	2	0.98		07/15/2009	No	Discharge of drilling wastes, Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.61		08/22/2017	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Disinfectants & Dis	infection	By-Produc	ts				and administrationes.
TTHM - Total Trihalomethanes (ppb)	80	N/A	4.5		9/27/2016	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	1.8		9/06/2016	No	Byproduct of drinking water disinfection
Chlorine ² (ppm)	4	4	0.23		9/27/2016	No	Water additive used to control microbes

Copper (ppm) Sodium is not a	1.3	13	970ppd	06/18/ 2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits, Leaching from wood preservatives
Lead (ppb)	15	0	2ppd	06/18/ 2015	0	No	Corrosion of household plumbing systems Erosion of natural deposits
Inorganic Contaminant Subject to AL	AL	MCLG	Your Water	Year Sampl ed	# of Samples Above AL	Does System Exceed AL? Yes / No	Typical Source of Contaminant
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	0	N/A	2017	No	Human and animal fecal waste.
E. coli in the distribution system (positive samples)	See E. coli ³ note below	0	0	N/A	2017	No	Human and animal fecal waste.
Total Coliform (total number or % of positive samples/month)	π	N/A	N/A	N/A	2017	NO	Naturally present in the environment.

The chlorine "Level Detected" was calculated using a running annual average.

90 percent of the samples collected were at or below the level reported for our water.

Information about 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 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 or

(1) MONITORING VIOLATION IMPORTANT IMFORMATION ABOUT YOUR DRINKING WATER

During the monitoring period from June 1, 2017 to June 30, 2017 we did not take the required number of routine samples for Total Trihalomethanes and Haloacetic Acids. This violation did not pose a threat to the quality of the drinking water. We will collect follow up samples in June 2018 in order to return to compliance. We apologize for this error and will work

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 <u>www.ci.eaton-rapids.mi.us.</u> This

We invite public participation in decisions that affect drinking water quality. City Council meetings 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 Mark Lease, City Water Dept. at (517) 663-8118 ext.8117 or by e-mail at mlease@cityofeatonrapids.com (web For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

E. coli MCL violation occurs if: (1) routine and repeat samples total coliform-positive and either is E. coli-positive, or (2) supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) supply fails to analyze total coliform-positive