



**CITY OF GENEVA**  
**IEPA Facility #IL0890350**  
**2017**  
**Annual Drinking Water Quality Report**

**We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report includes drinking water facts and contaminants detected in your drinking water supply during calendar year 2017, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.**

**Contact Name: Mike Martens**  
**Telephone Number: 630-232-1551 ext. 3103**

Este informe contiene informacion muy importante Sobre el aqua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

Before we begin listing our unique water quality characteristics, here are some important facts you should know to help have a basic understanding of drinking water in general.

**Sources of Drinking Water**

Our source of water comes from: **Groundwater Wells**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 system, 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 result of oil and gas production and mining activities.

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 at (800)426-4791.

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. FDA 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, person 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.

### **Source Water Assessment Information**

Well 8 (00345), Well 9 (00584), Well 10 (00961), Well 11 (01681) utilize a sand and gravel aquifer. Well 6 (20044), Well 12 (01682), Well 13 (01683) utilize a deep bedrock aquifer.

### **Source Water Assessment Summary**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled City Council meetings on the 1<sup>st</sup> and 3<sup>rd</sup> Monday of each month. The source water assessment for our water supply has been completed by the Illinois EPA. If you would like a copy of this information, please call our Water Supply and Distribution Supervisor Mike Martens at 630-232-1551 ext. 3103. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation / recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, sixty potential source or possible problem sites were identified within the survey of the Geneva's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project management Sections of the Illinois EPA indicated several additional sites with ongoing remediation which may be of concern. The Illinois EPA has determined that the source water obtained from Geneva Community Water Supply Wells #6, #12, and #13 are not susceptible to contamination. However, the source water obtained from Wells #8, #9, #10, and #11 are susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.

### **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 1000 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient shower head. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plant only when necessary.

- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach you kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulation and insuring that no contaminants can, under any flow condition, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you isolating it if that is necessary.

- Boiler / Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not include)
- Additional source(s) of water on the property
- Decorative pond
- Water trough

## 2017 Regulated Contaminants Detected

### -Definition of terms-

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ALG	Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
Level 1 Assessment	A Level 1 assesment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria may have been found in our water system
Level 2 Assessment	A Level 2 assesment is 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
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: 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: The highest level of disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no know or expected risk to health. MRDLGs allow for a margin of safety.
MREM	Millirems per year (a measure of radiation absorbed by the body)
N/A	Not Applicable
NTU	Nephelometric Turbidity Units.
pCi/L	Picocuries per liter ( a measure of radioactivity)
ppb	Parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.
ppm	Parts per million or milligrams per liter (mg/L) - our one ounce in 7,350 gallons of water.
RDL	Representative Detection Level
Treatment technique or TT	A required process intended to reduce the level of a contaminant in drinking water.

### City of Geneva - 2017 Water Quality Data IEPA #IL0890350

Lead & Copper										
Lead MCLG	Lead Action Level (AL)	Collection Date	Lead 90th Percential	# Sites Over Lead (AL)	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper (AL)	Violation	Likely Source of Contaminant
0	15 ppb	2017	4.68	1	0	1.3 ppm	0	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits.

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. City of Geneva 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>

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
<b>Chlorine</b>	2017	1.11	.7 - 1.1	MRDLG =4	MRDL =4	ppm	No	Water additives to control microbes
<b>Haloacetic Acids</b>	2017	2	1.17 - 2.0	N/A	60	ppb	No	By-product of drinking water chlorination
<b>TTHMs [Total Trihalomethanes]</b>	2017	15	11.49 - 15	N/A	80	ppb		By-product of drinking water chlorination

Coliform Bacteria						
MCLG	Total Coliform MCL	Highest number of positive samples	Fecal Coliform or E.Coli MCL	Total number of positive Fecal Coliform or E.Coli samples	Violation	Likely Source of Contaminant
0	0 positive monthly samples	0	Fecal Coliform or E.Coli MCL: A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. Coli positive	0	No	Naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Inorganic Contaminants	Collection Date	Highest Level Detected	Ranges of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
<b>Barium</b>	2016	0.039	0.039	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural Deposits
<b>Flouride</b>	2017	0.78	.52 - .78	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
<b>Cyanide</b>	2015	Non Detected	0	200	200	ppb	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
<b>Hexavalent Chromium</b>	2012	Non Detected	0	0.1	0.1	ppm	No	Discharge from steel and pulp mills, erosion of natural deposits of chromium-3
<b>Nitrate (measured as nitrogen)</b>	2017	Non Detected	0	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Inorganic Contaminants	Collection Date	Highest Level Detected	Ranges of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
<b>Combined Radium 226/228</b>	2017	Non Detected	Non Detected	0	5	pCi/L	No	Erosion of natural deposits
<b>Gross Alpha Emitters</b>	2017	Non Detected	Non Detected	0	15	pCi/L	No	Erosion of natural deposits
State Regulated Contaminants	Collection Date	Highest Level Detected	Ranges of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
<b>Iron</b>	2017	0.05	0.00 - .05	N/A	1	ppm	No	Erosion from naturally occurring deposits.
<b>This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.</b>								
<b>Manganese</b>	2017	0.041	.010 - .041	N/A	0.15	ppm	No	Erosion from naturally occurring deposits.
<b>This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.</b>								
<b>Sodium*</b>	2016	11.7	11.7	N/A	N/A	ppm	No	Erosion from naturally occurring deposits. Used in water softener regeneration
There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium- restrict diet, you should consult a physician about this level of sodium in the water.								
Unregulated Contaminant Monitoring Rule3 (UCMR 3)	Collection Date	Results	Representative Detection Level (RDL)	Units	Violation	Likely Source of Contaminant		
<b>Chlorate</b>	2015	110	20.0	ppb	No	Agricultural defoliant, disinfection byproduct		
<b>Strontium</b>	2015	138.3	3.0	ppb	No	Naturally occurring element, historically used in glass of cathode-ray tube t.v.'s		
<b>Vanadium</b>	2015	Non Detected	0.2	ppb	No	Naturally occurring element, can be added to steel or aluminum for strength		
<b>Chromium</b>	2015	0.2	0.2	ppb	No	Naturally occurring element, used in making steel alloys, chrome plating		
<b>Cobalt</b>	2015	Non Detected	1.0	ppb	No	Naturally occurring element, found in most rocks, soil, plants, and animals		
<b>Molybdenum</b>	2015	Non Detected	1.0	ppb	No	Naturally occurring element, found in ores and present in plants, animals		
<b>Chromium (VI)</b>	2015	Non Detected	0.03	ppb	No	Naturally occurring element, used in making steel alloys, chrome plating		
<b>1,4-Dioxane</b>	2015	Non Detected	0.07	ppb	No	Used as a solvent in the manufacture of paper, textile products		
Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.								