

# WATER QUALITY REPORT

## VILLAGE OF RIVER GROVE

### **PURPOSE**

This is an annual report that summarizes the quality of drinking water from January 1st to December 31st, 2020. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is being issued in compliance of the Safe Drinking Water Act and our commitment in supplying a safe and reliable water supply. The Village of River Grove purchases water directly from the City of Chicago and is delivered to the Village's underground reservoir. The Village then pumps the water into its distribution system. We have included with this report information from the City of Chicago pertaining to entry-point water quality monitoring performed by them.

### **WATER QUALITY**

The water treatment facilities of the City of Chicago control the water quality supplied to the Village of River Grove. The Village then provides additional chlorine to the water to maintain the quality as delivered.

### **TESTING**

The Village of River Grove tests the water supply for chlorine content daily. The Village also takes monthly bacteriological samples, lead/copper samples as required, and Haloacetic Acid and Trichalomethane samples quarterly. If you have any questions about this report or concerning your water system, please contact John Bjorvik, Water Superintendent, (708) 452-7055. We want our valued customers to be informed about their water quality. You may also ask questions regarding our water system at our Village Board meetings, which are held at 7:00 p.m. on the first and third Thursday of each month, at the Village Hall, 2621 Thatcher Avenue.

### **SOURCE WATER ASSESSMENT**

Source Water Assessment Summary. The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at (312) 744-6635.

### **SUSCEPTIBILITY TO CONTAMINANTS**

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake.

### **EDUCATIONAL INFORMATION**

The sources of drinking water (both tap water 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 can dissolve naturally occurring minerals and radioactive material, and pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural contaminants, such as 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 contaminant, 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.
- Radioactive contaminants, which may 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 USEPA's Safe Drinking Water Hotline (800) 426-4791.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amounts 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, 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 about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (800) 426-4791.

### **LEAD TESTING**

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. We 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>.

# 2020 Water Quality Data

## DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT 0316000 CHICAGO

**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.

**Highest Level Detected:** This column represents the highest single sample reading of a contaminant of all the samples collected in 2019.

**Range of Detections:** This column represents a range of individual sample results, from lowest to highest, that were collected during the CCR calendar year.

**Date of Sample:** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**N/A:** Not applicable

Detected Contaminants						
Contaminant (unit of measurements) Typical source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
<b>Turbidity Data</b>						
Turbidity (NTU/Lowest Monthly % $\leq$ 0.3 NTU <i>Soil Runoff</i> )	N/A	TT (Limit: 95% $\leq$ 0.3 NTU)	Lowest Monthly % 100%	100% - 100%		
Turbidity (NTU/Highest Single Measurement)	N/A	TT (Limit 1 NTU)	0.16	N/A		
<b>Inorganic Contaminants</b>						
Barium (ppm) <i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</i>	2	2	0.0201	0.0198 – 0.0201		
Nitrate (as Nitrogen) (ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.35 – 0.42		
Total Nitrate & Nitrite (as Nitrogen) (ppm) <i>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</i>	10	10	0.42	0.33 – 0.42		
<b>Total Organic Carbon (TOC)</b>						
TOC	The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA					
<b>Unregulated Contaminants</b>						
Sulfate (ppm) <i>Erosion of naturally occurring deposits</i>	N/A	N/A	27.8	27.5 – 27.8		
Sodium (ppm) <i>Erosion of naturally occurring deposits; Used as water softener</i>	N/A	N/A	9.55	8.73 – 9.55		
<b>State Regulated Contaminants</b>						
Fluoride (ppm) <i>Water additive which promotes strong teeth</i>	4	4	0.75	0.65 – 0.75		
<b>Radioactive Contaminants</b>						
Combined Radium (226/228) (pCi/L) <i>Decay of natural and man-made deposits.</i>	0	5	0.95	0.83 – 0.95		02-04-2020
Gross Alpha excluding radon and uranium (pCi/L) <i>Decay of natural and man-made deposits.</i>	0	15	3.1	2.8 – 3.1		02-04-2020

### Units of Measurement

**ppm:** Parts per million, or milligrams per liter

**ppb:** Parts per billion, or micrograms per liter

**NTU:** Nephelometric Turbidity Unit. Used to measure cloudiness in drinking water.

**$\leq$ 0.3 NTU:** Percent of samples less than or equal to 0.3 NTU

**pCi/L:** Picocuries per liter, used to measure radioactivity

**Turbidity:** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

**Unregulated Contaminants:** A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

**Fluoride:** Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.6 mg/l to 0.8 mg/l with a recommended optimal fluoride level of 0.7 mg/l.

**Sodium:** There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

### Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Max. Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Max. Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	N	Naturally present in the environment

### Regulated Contaminants

Disinfectants and Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2020	1	0.8 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2020	21	9.51 - 28.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	50	16.1 - 65.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

### Lead and Copper

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	2020	0	15	6.86	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

**The Lead and Copper Rule:** The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

### Water Quality Test Results

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment 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.

**Maximum Contaminant Level or 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.

**Maximum Contaminant Level Goal or 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 Residual Disinfectant Level or 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 or MRDLG:** 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.

**na:** not applicable

**mrem:** millirems per year (a measure of radiation absorbed by the body)

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

## 2020 Summary of Violations

Violation Description	Violation Begin	Violation End	Violation Explanation
Lead Consumer Notice	12/30/2020	1/21/2021	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.