

**ROCHELLE
IL1410500**

Annual Water Quality Report for the period of January 1 to December 31, 2016.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ROCHELLE is Ground Water. For more information regarding this report contact: Adam Lanning, 815-562-4155.

Este informe contiene información importante sobre el agua potable. Si necesita una copia del reporte en español comuníquese con el departamento de servicio al cliente al número 815-562-4155.

Water Quality

RMU has developed a contingency plan to ensure that, through emergency preparedness, any risks to the water supply will be minimized.

Water Resources

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 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.

Drinking water, including bottle 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 EPAs Safe Drinking Water Hotline at 800-426-4791.

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 result 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. 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 public. 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. 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.

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>

Our Water Supply

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 the Utility Advisory Board meetings held at 3:00 p.m. on the third Wednesday of January, March, May, July, September and November at the Technology Center, 910 Technology Parkway. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by RMU or call our Water Operator at 815-562-4155. 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.p1>.

To determine Rochelle’s susceptibility to groundwater contamination, information obtained during a Well Site Survey, which was performed by the Illinois Rural Water Association on July 15, 1999, was reviewed. Based on this information, several potential sources of contamination were identified within proximity of this water supply’s wells. The Illinois EPA does not consider the City’s source water 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. In anticipation of the U.S. EPA’s proposed Ground Water Rule, the Illinois EPA has determined that the water supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community’s wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists that should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and a sanitary survey of the water supply did not indicate a viral contamination threat. Because the community’s wells are constructed in a confined aquifer, which should minimize the movement of pathogens into the wells, well hydraulics was not considered to be a significant factor in the vulnerability determination. Hence, well hydraulics was not evaluated for this groundwater supply.

Source Water Information

Source Water Name	Location	Type of Water
Well 10 (11944)	Southview Drive	GW
Well 11 (01537)	Flagg Road	GW
Well 12 (02022)	3188 Hayes Road	GW
Well 8 (11814)	NEXT to TOWER Caron Road	GW
Well 4 (11810)	NEXT to TOWER off N 7 TH	GW

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 is based on running annual average of monthly samples.

Level 1 Assessment: 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 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 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 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 residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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.

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

na: Not applicable

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.

CITY OF ROCHELLE



Rochelle Municipal Utilities

**ANNUAL WATER
QUALITY REPORT**

**January 1, 2016
to
December 31, 2016**



**333 Lincoln Highway
Rochelle, IL 61068
815-562-4155**

Coliform Bacteria

2016 Regulated Contaminants Detected

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum 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

Lead & Copper Definitions:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or the requirements which a water system must follow.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	6/25/2014	1.3	1.3	0.56	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; corrosion of household plumbing systems.
Lead	6/25/2014	0	15	2.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Regulated Contaminants Disinfectants and Disinfection By-Products		MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2016	0.6	0.3-0.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	2016	4	3.54-3.54	No goal for the total	80	ppb	N	By-product of drinking water disinfection

This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2016	2.7	2.7 - 2.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from Glass and Electronics production wastes
Barium	2016	0.17	0.17 - 0.17	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2016	0.404	0.404-0.404	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron	2016	3.9	0.022-2.6		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits
Manganese	2016	88	0-54	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (Measured as Nitrogen)	2016	0.46	0-0.46	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2016	11	11-11			ppm	N	Erosion from naturally occurring deposits; used in water softener regeneration.
Zinc	2016	0.021	0.021-0.021	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2016	8	2.9-14.05	0	5	pCi/L	Y	Erosion of natural deposits
Gross Alpha excluding radon and uranium	2016	4.15	4.15-4.15	0	15	pCi/L	N	Erosion of natural deposits

***Violation Table – Combined Radium 226/228**

Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, Average	01/01/2016	03/31/2016	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	04/01/2016	06/30/2016	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	07/01/2016	09/30/2016	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	10/01/2016	12/31/2016	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

*The well that violated the drinking Water Standard was turned off in 2016. A filter treatment plant will be operational in 2018 for that well.