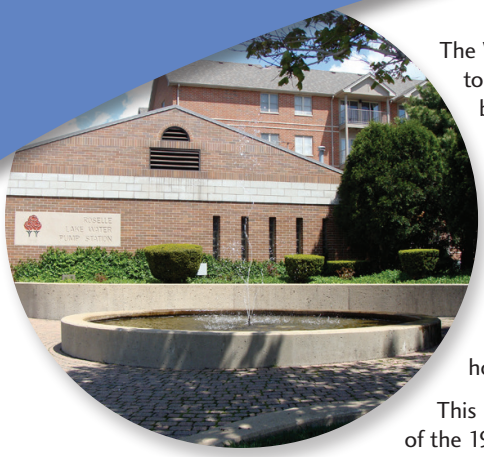
Water Quality Report



The Village of Roselle is dedicated to providing its residents and businesses with a dependable supply of safe drinking water. This Consumer Confidence Report (CCR) provides residents and businesses served by the Village-owned water distribution system with the information necessary to make informed decisions about how they use tap water.

This report is also a requirement of the 1996 Safe Drinking Water Act amendments. It summarizes where your water came from, what it was made of, and how it compared to the standards established by regulatory agencies. Information about water consumed during the reporting year will be made available in a CCR scheduled for distribution during the following year.

Information in this report describes water consumed during the 2014 calendar year. We are pleased to report that the Village-owned water system met all water quality standards during 2014.

Where does our water come from?

Our water supply comes from Lake Michigan, one of the five Great Lakes. The lake water is treated and purified by the City of Chicago Water Department. The finished drinking water is then pumped to the DuPage Water Commission (DWC) in Elmhurst. The DWC then pumps the water to the Village of Roselle and twenty seven other DuPage communities via large water transmission pipes. Roselle has three connections to the DWC transmission pipes. Roselle also has emergency interconnections with Elk Grove Village, Schaumburg, and Hanover Park who are supplied with finished Lake Michigan drinking water by the Northwest Suburban Municipal Joint Action Water Agency.

By volume, Lake Michigan is the second largest of the Great Lakes. Hydrologically, it is inseparable from Lake Huron. The total shoreline, including all its islands, is almost 1,640 miles long. All 63 miles of shoreline within Illinois are considered to be in good condition. As water travels over or through the ground to the lake, it can dissolve naturally occurring minerals or radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Possible contaminants consist of:

Microbial contaminants such as viruses and bacteria. These contaminants may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants such as salts and metals. These contaminants can occur naturally or they can be the result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining operations, or farming.

Pesticides and herbicides 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, are by-products of industrial processes and petroleum production. They can also be produced by gas stations, urban storm water runoff, and septic systems. Untreated lake water has the potential to contain these types of contaminants. However, it is important to realize that these materials can be found throughout nature to some degree. Their presence does not necessarily mean that there is a health risk associated with our source water. Rather, the most important factor to consider is how much of a particular contaminant can be found in our source water.

Has an assessment been made of Lake Michigan water?

Yes! 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 only dilution as protection. This is the reason for mandatory treatment for all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance offshore 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.

Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area. From the building of offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's waterways and the city's Lakefront Zoning Ordinance.

Who regulates if the water is safe to drink?

In order to make certain that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) prescribe regulations that limit the amount of certain contaminants in the water distributed by public water systems. All public water systems, including the City of Chicago and the Village of Roselle, must monitor their systems and comply with these regulations. Failure to do so is a violation of federal and state laws. Food & Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Is Roselle's drinking water safe?

Yes! During 2014, Roselle complied with all of the federal and state regulations pertaining to the storage and distribution of drinking water. All samples met water quality standards. The table on page 3 summarizes the tests that were performed to ensure compliance with water quality standards. Page 2 has additional information and outline the definitions associated with this information. The City of Chicago conducted a number of additional water quality tests as well. In fact, they routinely performed over 70 different water quality tests as part of their raw water treatment process. The results of all of these tests complied with federal and state drinking water regulations. The results of Chicago's and the DuPage Water Commissions's analyses are available to the public at the Village of Roselle Public Works Facility.

Are there any problems with Lead or Copper in our water?

No! The Village tests for lead and copper content indicate that levels of either contaminant in our drinking water were below the levels required by regulation and in some cases, below the level detectable.

Presently, the Village tests for lead and copper content once every three (3) years. We collect samples from the taps of 30 private homes. These samples are then sent to the IEPA laboratories for analysis. The table on page 3 summarizes the results of our last round of lead and copper testing in 2014.

Our current rate of testing, once every three (3) years, as well as our sample size (30 samples), were prescribed by IEPA following initial rounds of annual testing using larger sample sizes. These initial tests

indicated that there were no significant problems with lead or copper contamination in our drinking water. Therefore, our sampling frequency and sample size was reduced.

However, it should be noted that infants and young children are more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than in other homes due to the types of materials used in your home's plumbing system. If you are concerned about elevated lead levels in your water, you may wish to have it tested at a local laboratory. Flushing your tap for 2 minutes before using the water will also reduce your risk of lead exposure. Additional information about lead in drinking water is available from the USEPA's Safe Drinking Water Hotline (800-426-4791). You can also visit them on the web at www.epa.gov.

Is there Cryptosporidium in our water?
No! A few years ago, this cyst-like microbe made national headlines when it made dozens of people in Milwaukee sick with fever and diarrhea. This organism can be found in most raw surface water. It is caused by animal waste products deposited into the source water. However, properly filtered and disinfected water is virtually free of it. The Village of Roselle has never had a case of cryptosporidiosis, the illness caused by this organism. Furthermore, the City of Chicago routinely conducts monthly tests for cryptosporidium. They have never reported the presence of this microbe in their samples.

Should I be concerned about Arsenic in our water?
No! On October 31, 2001 US EPA Administrator Christie Whitman announced a lower standard for arsenic. The standard is reduced from 50 ppb to 10 ppb. Water supplies were required to comply with the new standard by January 23, 2006. The City of Chicago tested for arsenic and a range from 0.52 to 0.67 p.p.b. was detected. Arsenic can be the result of the erosion of natural deposits, runoffs from orchards, or the runoff from glass and electronic production wastes.

Who can I talk to if I have questions or comments about the Village-owned water system?
If you have any questions regarding the Village of Roselle's drinking water, or this report, please contact Mike Schulz, Water Superintendent at (630) 671-2368. Additionally, you are always welcome to participate or voice concerns about your drinking water at the regularly scheduled Village Board meetings. The Village Board routinely meets the second and fourth Monday of each month at 7:00 p.m. at the Village Hall. We are dedicated to providing safe, high quality drinking water in a reliable, economical and professional manner.

DEFINITIONS

- MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- MCL - Maximum Contaminant Level: The highest level of a known contaminant allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.
- "Range of Detection" represents a range of individual sample results, from lowest to highest, taken during the CCR calendar year.
- "Date of Sample" represents whether the sample was collected during the CCR calendar year or the last time IEPA required samples to be collected. If no date appears, then the sample was collected during the reporting year.
- ppm - Parts Per Million (same as mg/l) – or one ounce in 7,350 gallons of water.
- ppb - Parts Per Billion (same as ug/l) – or one ounce in 7,350,000 gallons of water.
- #pos/mo - This represents the number of positive samples per month
- %pos/mo - This represents the percentage of positive samples per month.
- AL - Action Level: The level of a contaminant above which certain prescribed treatment techniques must be employed to reduce contaminant risk.
- ND - Not Detectable: Not found at the testing limits.
- NA - Not Applicable.
- TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- %<0.3 NTU - Percent of samples less than .3 NTU
- "Amount" column is an average of all sample result data collected during the CCR calendar year
- NTU - Nephelometric Turbidity Unit, used to measure cloudiness in the drinking water.
- pCi/l – Picocurries per litre, used to measure radioactivity.

Turbidity is a measurement of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants. During the winter months your water may appear to be turbid, but in fact only contains air bubbles. This is nothing to be concerned about. Run your tap till your water gets cold or simply let the water stand a few minutes for it to clear.

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l. Our fluoride levels range from 0.8 mg/l to 0.9 mg/l.

Sodium has no MCL. Monitoring is required to provide information to consumers and health officials concerned about sodium intake due to dietary precautions. However, individuals on a sodium-restricted diet should consider consulting a physician.

Vulnerable Populations: Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of these contaminants does not necessarily indicate the water poses a health risk. Additional information regarding these contaminants and the potential health risks associated with drinking water may be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline (SDWH) at 1-800-426-4791.

Important Note: 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 1-800-426-4791.

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2014 VILLAGE OF ROSELLE WATER QUALITY TESTING RESULTS

SUBSTANCE (UNITS)	MCLG	MCL	HIGHEST LEVEL DETECTED	RANGE OF DETECTION	VIOLATION NOTED	LIKELY SOURCE OF CONTAMINATION
REGULATED AND TESTED FOR IN THE VILLAGE-OWNED WATER DISTRIBUTION SYSTEM						
TOTAL COLIFORM BACTERIA (%pos/mo)	0	0	ND		NO	Naturally present in the environment.
CHLORINE	4.0	4.0	0.7	0.5–1.0	NO	Water additive used to control microbes.
HAAS - Total Haloacetic Acids (ppb)	NA	60	23.9	9.37–23.9	NO	By-product of drinking water chlorination
TTHMs - Total Trihalomethanes (ppb)	NA	80	46.7	21.04–46.7	NO	By-product of drinking water chlorination
REGULATED AND TESTED FOR AT THE CUSTOMERS' TAP (Sample of 30 homes tested - Date of sample, July 2014)						
LEAD (ppb)	0	AL=15	14.9	0 exceeding AL	NO	Corosion of household plumbing systems. Erosion of natural deposits.
COPPER (ppm)	1.3	AL=1.3	0.263	0 exceeding AL	NO	Corosion of household plumbing systems. Erosion of natural deposits leaching from wood preservatives.
REGULATED AND TESTED FOR BY THE CITY OF CHICAGO (State regulated and inorganic substances)						
TOTAL COLIFORM BACTERIA (%pos/mo)	0	5%	0.6		NO	Naturally present in the environment.
TURBIDITY(%<0.3 NTU)	NA	TT	0.3 NTU	99.7%-100%	NO	Soil runoff.
TURBIDITY (NTU highest single measurement)	NA	TT=1 NTU max	0.11 NTU	NA	NO	Soil runoff.
ARSENIC (ppb)	0	10	1	0.519–0.767	NO	Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production wastes.
BARIUM (ppm)	2	2	0.0227	0.0223–0.0237	NO	Discharge of drilling wastes. Discharge from metal refineries; erosion of natural deposits.
LEAD (ppb)	0	AL=15	6.6	1 exceeding AL	NO	Corrosion of household plumbing shstems. Erosion of natural deposits.
COPPER (ppm)	1.3	AL=1.3	0.046	0 exceeding AL	NO	Corrosion of household plumbing shstems. Erosion of natural deposits leaching from wood preservatives.
NITRATE–AS NITROGEN (ppm)	10	10	0.308	0.304–0.308	NO	Runoff from fertilizer use. Leaching from septic tanks. Sewage. Erosion of natural deposits.
NITRATE & NITRITE (ppm)	10	10	0.362	0.351–0.362	NO	Runoff from fertilizer use. Leaching from septic tanks. Sewage. Erosion of natural deposits.
TTHMs–Total Trihalomethanes (ppb)	NA	80	31.1	9.4–31.1	NO	By-product of drinking water disinfection.
HAAS–Haloacetic Acids (ppb)	NA	60	14.6	2.6–14.6	NO	By-product of drinking water disinfection.
CHLORINE–as C12 (ppm)	4.0	4.0	1	1-1	NO	Drinking water disinfectant.
FLOURIDE (ppm)	4.0	4.0	0.977	0.841–0.977	NO	Water additive which promotes strong teeth.
SODIUM (ppb)	NA	NA	10	9.5–10	NO	Erosion of naturally occuring deposits. Used as water softener.
COMBINED RADIUM 226/228 (pCi/l)	0	5	0.84	0.5–0.84	NO	Decay of natural and man-made deposits.
GROSS ALPHA (pCi/l)	0	15	6.6	6.1-6.6	NO	Decay of natural and man-made deposits.