# ANNUAL DRINKING WATER QUALITY REPORT- 2016 SESSER, IL

## **Introduction**

This year, as in past years, your tap water met all U.S.E.P.A. and State drinking Water health standards. The City vigilantly safeguards its water supply, it is noted that our system had no violations of a contaminant level or of any other water quality standard in 2016. This report summarizes the quality of water that we provided last year, including details about where the water comes from, what it contains and how it compares to standards set by regulatory agencies. We are committed to providing you with this information about the water you are receiving.

If you have any questions about this report or concerns about your water system, please contact Jerome Kopec at the Sesser Water Dept at (618) 625-3611. Board meetings are held the Second Thursday of each month at 6:30 pm at the Community Bld located at 110 North Walnut St. in Sesser IL

# Water Source Assessment

The City purchases water from the Rend lake Water Plant. Intercity draws surface water from the intake structure at Rend Lake: The source water assessment for the Rend lake supply has been completed by the Illinois E.P.A. The Illinois E.P.A considers all surface water sources susceptible to potential pollution problems. For your own copy of this report you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

# Health Issues

Some people may be more vulnerable to contaminants in drinking water then the general population. Immunecompromised 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. US E.P.A. / C.D.C. guide lines 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 at 1-800-426-4791.

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 affects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

In order to insure that tap water is safe to drink, USEPA prescribes regulations that 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.

## Contaminant Source

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 radio active material, and can pick-up substances resulting from the presence of animals or from human activity. Possible contaminants consist of;

- <u>Microbial Contaminants</u> such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- <u>Inorganic Contaminants</u> such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic waste water discharges, oil and gas production, mining or farming.
- <u>Pesticides & Herbicides</u> which may come from a variety of sources such as agricultural, urban storm water runoff and residential uses.
- <u>Organic Chemical Contaminant</u> 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.
- <u>Radioactive Contaminants</u> which maybe naturally occurring or be the result of oil and gas production and mining activities.
- 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. 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 you 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.

Jerome Kopec Water Superintendent

#### Annual Drinking Water Quality Report City of Sesser, Illinois II00550450

#### 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 you drinking water and the effects made by the City of Sesser water system to provide safe drinking water. The source of drinking water used by the City is purchased from the Rend Lake Conservancy District.

### Regulated Contaminants Detected in 2016 (collected in 2016 unless noted)

#### City of Sesser Water Department

Lead and Copper Definitions: Action Level (AL); the concentration of contaminant which, if exceeded, triggers treatment or other equipments within a water system

Action Level	Goal (ALG); the le	evel of a contamina	unt in drinking w	ater below which the	ere is no known or	expected risk to he	alth
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Lead MCLG	Lead Action Level (AL)	Lead 90* Percentile	# sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90 <sup>th</sup> Percentile	# Sites Over Copper AL	Likely Source of contamination
0 ppb Violations none	15 ppb	0	0	1.3 ppm Violations none	1.3 ppm	0	0	Corrosion of household plumbing system & Erosion of natural runoff

Water quality Test Results

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

Maximum Contaminant

Maximum Contaminant Level (MCL); the highest level of a contaminant that is allowed in drinking water. MCL's are set as choice to Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no longer know or expectant health risks. MCLG's allow for a margin of safety. Mg/l: milligrams per liter or parts per million- or one ounce in 7,350 gallons of water

ug/l: micrograms per liter or parts per billions- or one ounce in 7,350,000 gallons of water

na: not applicable pCil/L Picocuries per liter- a measure of radioactivity

Avg; Regulatory compliance which some MCLs are based on running annual average of monthly samples

Maximum Residual Disinfectant Level (MRDL): the highest level of disinfectant allowed in drinking water

Maximum Residual Disinfectant Level (MRDLG): the level of disinfectant in drinking water below which there is no known or expectant health risks. MRDLG's allow margin of safety.

Regulated Contaminants Collected 2016	Highest Level	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation	Likely source of contamination
Chloramines 12-31-2016	2.6	2.0-3.0	ppm	Mrdlg=4	Mrdl=4	No	Water additive used to control microbes
Total Haloacetic Acids (HAAS)	19	14.9-24.2	ppb	No goal for the total	60*	No	By-product of drinking water chlorination
TTHMx (Total Trihalomethanes)	40	13.4-45.9	ppb	No goal for the total	80*	No	By-product of drinking water chlorination

### State Regulated Disinfectants & Disinfection By Products

Not all sample results may have been used for calculating the highest level detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

\* MCL Statement: The maximum contaminant level (MCL) for TTHM and HAAS is respectively 80 ppb and 60 ppb and is currently only applicable to surface supplies that serve 1,000 or more people. These MCLs will become effective 01/01/2004 for all groundwater supplies and surface supplies serving less people. Until 01/01/2004, surface water supplies serving less than 1,000 people, any size water supply that purchases from a surface water source, and supplies serving more than 10,000 people must meet state imposed TTHM MCLL of 100 ppm. Some people who drink water containing the MCL of trihalomethane, over many years, experience problems with their livers, kidneys, or central nervous systems, and have increased risk of getting cancer.

2016 Regulated Contaminants Detected

### REND LAKE RESULTS

State Regulated Inorganic Contaminant Collected 20126	Highest Level	Range of Levels	Unit of Measurement	MCLG	MCL	Violation	Likely source of Contaminant.	
Arsenic	1	.959959	ppb	0	10	No	Erosion of natural deposits; Runoff from orchards.	
Barium	.0209	.0209- .0209	ppm	2	2	No	Discharge of drilling waste, Erosion of natural deposits	
Fluoride	0.6	.572572	ppm	4	4	No	Erosion of natural deposits, water addition for strong teeth	
Sodium	19	19-19	ppm	n/a	n/a	No	Erosion of naturally occurring deposits, used in water softeners	
Synthetic Organic Contaminants Collected in 2016	Synthetic Organic Contaminants Collected in 2016							
Atrizine	.53	0-0.53	ppb	3	3	No	Runoff from fertilizer used on row crops	
Di (2-ethylhexyl) phthalate	2.5	0-2.5	ppb	0	6	No	Discharge from Rubber and Chemical Factories	
Radioactive Contaminants collected 1-16-2014 Combined Radium 226/228	0.26	0.26-0.26	pCi/L	0	5	No	Erosion of Naturally occurring deposits	

Turbidity- Regulated at the Water Treatment Plant- Information Statement: Turbidity is a measurement of the cloudiness of the particles. We monitor it because it is a good indicator of water quality and effectiveness of our filtration and disinfectants

Limit (Treatment Technique)	Lowest Monthly % meeting limit	Limit Treatment technique Violation	Source
0.5 NTU (POP served > 10,000)	100%	0.3 NTU No	Soil runoff
0.3 NTU (POP served < 9,999)	Highest single measurement 0.31	1 NTU No	

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirement set, unless a TOC Violation is noted in the violation section.

Our water system was required to monitor for the contaminants required under the Unregulated Contaminant Monitoring Rule (UCMR).