Introduction

This report is intended to provide you with important information about your tap water and the efforts made by the water system to meet all U.S.E.P.A. and State drinking Water health standards. The City vigilantly safeguards its water supply and 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

Water is Purchased Surface water from the Rend lake Intercity water system. The source water assessment for our 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. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation. Filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion. For your own copy of this report you may obtain a copy at City hall or access the Illinois EPA website at <a href="http://www.epa.state.il.us/cgibin/wp/swap-fact-sheets.pl">http://www.epa.state.il.us/cgibin/wp/swap-fact-sheets.pl</a>.

Health Issues

Some people may be more vulnerable to contaminants in drinking water then the general population. Immune-compromised 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;

- 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 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.
- Organic Chemical Contaminant 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 system's.
- <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 Sesser Water Superintendent

### Annual Drinking Water Quality Report City of Sesser, Illinois II0550450

#### Annual Water Quality Report For the period of January 1 to December 31, 2018

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 2018 (collected in 2018 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 level of a contaminant in drinking water below which there is no known or expected risk to health

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	15 ppb	0	0	1.3 ppm	1.3 ppm	0	0	Corrosion of household plumbing
Violations none				Violations none				system & Erosion of natural runoff

ater quality Test Results

Definitions

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

Not applicable

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 or ppm: ug/l or ppb:

milligrams per liter or parts per million- or one ounce in 7,350 gallons of water micrograms per liter or parts per billions- or one ounce in 7,350,000 gallons of water

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

mrem pCil/L

Avg;

Picocuries per liter- a measure of radioactivity

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.

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

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.

# State Regulated Disinfectants & Disinfection By Products

Regulated Contaminants Collected 2018	Highest Level	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation	Likely source of contamination
Chloramines Collected in 12-31-2018	3	2.8-3.0	ppm	Mrdlg = 4	Mrdlg= 4	No	Water additive used to control microbes
Total Haloacetic Acids (HAAS)	20	14.5 – 23.2	ppb	No goal for the total	60	No	By-product of drinking water chlorination
TTHMx (Total Trihalomethanes)	37	25.4 – 44.9	ppb	No goal for the total	80	No	By-product of drinking water chlorination

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.

# 2018 Regulated Contaminants Detected

# Coliform Bacteria

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

### REND LAKE RESULTS

State Regulated Inorganic Contaminant Collected in 2018	Highest Level	Range of Levels	Unit of Measurement	MCLG	MCL	Violation	Likely source of Contaminant.
Arsenic	1	0.999 – 0.999	ppb	0	10	No	Erosion of natural deposits; Runoff from orchards. Runoff from glass and electronics production wastes.
Barium	0.0148	0.0148- 0.0148	ppm	2	2	No	Discharge of drilling waste, discharge for metal refineries, Erosion of natural deposits
Fluoride	0.6	.614614	ppm	4	4	No	Erosion of natural deposits, water addition for strong teeth. Discharge from fertilizer and aluminum factories.
Iron	0.754	0 – 0.754	ppm		1.0	No	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits.
Manganese	20.6	0-20.6	ppb	150	150	No	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits.
Sodium ·	20	19.7 –19.7	ppm	n/a	n/a	No	Erosion of naturally occurring deposits, used in water softeners
Synthetic Organic Contaminants							
Atrazine Collected in 2017	.37	0-0.37	ppb	3	3	No	Runoff from fertilizer used on row crops
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 Soil runoff
1 NTU	100%	0.3 NTU No	
	Highest single measurement 0.32	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).