2015 Quality Water Report
City of Leslie

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform residents about the quality water and services The City of Leslie delivers every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring that the quality of water provided to you meets the drinking water standard. Our water source is groundwater drawn from an aquifer formed from glacial material (Saginaw Aquifer). The State of Michigan performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential for contamination. The susceptibility rating is on a six-tiered scale from "very low" to "high" based primarily on geological sensitivity, water chemistry and contaminant sources. The susceptibility of our water source is rated "moderately Low".
The City of Leslie has implemented a Wellhead Protection Program to manage the well head protection areas around the City of Leslie water production wells. This program helps protect the City's water supply.
We are pleased to report that our drinking water meets or exceeds federal and state requirements.
If you have any questions about this report or concerning your water utility, please contact Robert Antekeier at 517-589-5115. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Tuesday of each month at 7:00pm at the City Hall.

The City of Leslie routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows results of our monitoring for the period of January 1st to December 31st, 2015. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe drinking water hotline (800-426-4791). As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and in some cases radioactive substances and can pick up substances resulting from the presence of animals or from human activity.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not-Detected (ND) - laboratory analysis indicates that the constituent is not present.
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
Pico curies per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 - The "Goal"(MCLG) is 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.

The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old. The table below represents the most current testing information available.

TEST RESULTS							
Contaminant	Violation Y/N	Level Detected	Unit of Measure	Date	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Fluoride**	N	0.28	ppm	2015	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Bromodichloromethane	N	.0008	ppm	2015	.08	.08	
Chloroform	N	.0027	ppm	2015	.08	.08	
Disinfection Byproducts							
TTHM [Total trihalomethanes]	N	3.5	ppb	2015	n/a	80	By-product of drinking water chlorination
HAA5 [Haloacetic Acids]	N	3	ppb	2015	n/a	60	By-product of drinking water chlorination

Lead & Copper Distribution Monitoring Results

Contaminant	Date Tested	90th Percentile (90% of samples ≤ this level)	# of Sites > Action Level	Action Level	Likely Source of Contamination
Lead	08/27/2015	3	0	15ppb	Corrosion of household plumbing systems, erosion of natural deposits
Copper	08/27/2015	270	0	1300ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Unregulated Contaminants *

Contaminant	Average of level detected	Range of level detected	Unit of measure	Date Tested
Sodium	10	10	mg/L	07/07/2015

*-Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
**-City does not add Fluoride to drinking water. Any Fluoride is naturally occurring.

Microbial Contaminants	MCL	Number Detected	Violation Yes/No	Typical Source of Contaminant
Total coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)	0	No	Naturally present in the environment
Fecal Coliform and E. coli	Routine and repeat sample total coliform positive, and one is also fecal or E. coli positive	0	No	Human and animal fecal waste

City of Leslie Average Distribution Chlorine Readings												
Month	1	2	3	4	5	6	7	8	9	10	11	12
Free	.53	.35	.32	.63	.47	.32	.19	.79	.66	.82	.81	.61
Total	.71	.44	.44	.75	.79	.51	.34	1.02	.81	1.20	1.51	.98
Max Free	.82					**Range**	.19-.82					
Max Total	1.51					**Range**	.34-1.51					

Microbiological Contaminants
The routine test to evaluate the bacteriological quality of drinking water is to analyze water samples for the presence of Total Coliform Bacteria, which is an indicator organism that is used as a health standard. The City of Leslie's monitoring schedule for bacteria requires the collection of two water samples from the distribution system each month to be analyzed for Total Coliform Bacteria in a property certified laboratory. The City of Leslie voluntarily collected three samples each month from the distribution system and source water samples from wells. In total the City of Leslie had 36 samples analyzed by the State of Michigan lab. All 36 samples reported negative for the presence of Total Coliform Bacteria.

What does this mean?
We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We are required to sample at 2 locations in the system as a precaution we also monitor the Water Treatment Plant. We are happy to report that our system has no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is safe at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be:

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 and residential uses.
Radioactive contaminants, which are naturally occurring or be the result of oil and gas production and mining activities.
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.
All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. The City of Leslie is responsible for providing high quality drinking water, but 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.

Some people may be more vulnerable to contaminants in drinking water than 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 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

City of Leslie Water Update

In 2012, the City of Leslie began work on a new Iron Removal Plant. Construction on the new iron removal plant was completed in 2013. The plant went into full operation in October of 2013. The plant oxidizes iron using chlorine rather than an aeration chamber. The City treats the water with phosphates for corrosion control and chlorine for oxidation and disinfectant to ensure drinking water is safe.

Since the new iron removal plant has gone on-line the City has received many complaints from customers regarding the smell, taste, and/or site of the water. These complaints have mainly been regarding high chlorine smell or iron in the water. Complaints have mainly been in areas of the city with old four inch water mains. The City continues to receive these complaints and has consulted various engineers and experts to rectify the situation. In addition, the City has flushed hydrants, made process changes to the iron removal plant, and used different phosphates in order to control the iron in the system. The problem is now isolated in the distribution system (water mains) as the water leaving the iron removal plant is tested daily and contains little or no iron.

The City of Leslie has kept the Michigan Department of Environmental Quality updated of the problems and strategies to solve these problems. The City continues to monitor for all federal and state mandated testing and has met all testing requirements and drinking water standards. The drinking water in Leslie meets the drinking water standard as shown in the water quality table above, and is safe to drink.

Going forward in 2016, the City is working with a new engineering firm. The City is working on addressing the water distribution issues by using BD-2000; a product specifically designed to remove iron sediment and biofilm from the water distribution system. At the time of this report, the City is in discussions with its new engineering firm on other solutions to the water issue that will address water chemistry and pH. The City continues to keep its water customers informed on the issue to the best of its ability.

Note* The City of Leslie received a reporting violation in 2015 from the DEQ when a sample copy of our lead and copper letter that we mailed to the residents who participated in our lead and copper testing last summer wasn't received by December 31st.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Leslie.

CERTIFICATION WSSN: 03840

I certify that this water supply has fully complied with the public notification regulations in the Michigan safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules.

Signature CDA

Aaron Desentz

City Manager Date Distributed: 4/28/16

Please call our office if you have questions.

We at the City of Leslie work around the clock to provide quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, and impact our quality of life and our children's future.

This report will not be mailed to individual residences. Copies of this report are available at City Offices or at http://www.cityofleslie.org

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If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint_filing;.cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office Of Adjudication, 1400 Independence Avenue, S.W. Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov."