

# 2012 Quality Water Report

## City of Leslie

### 6/22/13

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 the quality of your water. 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 source is "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. The City of Leslie did have one monitoring violation which is attached in this report.

If you have any questions about this report or concerning your water utility, please contact Brian Reed at 517-589-8236. 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 1<sup>st</sup> to December 31<sup>st</sup>, 2012. 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	Average /Range	MCLG	MCL	Likely Source of Contamination
<b>Radioactive Contaminants</b>							
Contaminant	Violation Y/N	Level Detected	Unit of Measure	Average /Range	MCLG	MCL	Likely Source of Contamination
4. Beta/photon emitters	N	<4	pCi/l		0	50	Decay of natural and man-made deposits
5. Alpha emitters	N	<3	pCi/l		0	15	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Arsenic	N	ND	Ppm		0	.01	Erosion of natural deposits; runoff from orchards, runoff from glass & electronics production wastes
10. Barium	N	0.08	ppm		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate as N	N	ND	ppm		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite as N	N	ND	ppm		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
16. Fluoride*	N	0.27	ppm		4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Volatile Organic Contaminants</b>							
73. TTHM** [Total trihalomethanes]	N	.009	Ppm		N/a	100	By-product of drinking water chlorination
HAA5**	N	0.003	ppm			0.060	By-product of drinking water chlorination

\*-Tested December 13, 2012    \*\*-Tested September 28, 2011

Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate those contaminants.

## Unregulated Contaminants \*

Contaminant	Average of level detected	Range of level detected	Unit of measure	Date Tested
Chloride	7	7	ppm	12/13/2012
Hardness	610	610	ppm	12/13/2012
Iron	ND	ND	ppm	12/13/2012
Sodium	7	7	ppm	12/13/2012
Sulfate	234	234	ppm	12/13/2012

\*-Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps DPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

## Lead & Copper Distribution Monitoring Results

Contaminant	Date Tested	Number of Sites Tested	90 <sup>th</sup> Percentile (90% of samples ≤ this level)	# of Sites over Action Level	MCL/MCLG level/ units of Measurement	Likely Source of Contamination
Lead	12/13/12	20	.004 ppm	0	.015ppm	Corrosion of household plumbing systems, erosion of natural deposits
Copper	12/13/12	20	.72 ppm	1	1.3ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## 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 properly certified laboratory. The City of Leslie voluntarily collected three samples each month from the distribution system and two additional source water samples from wells. In total the City of Leslie had 60 samples analyzed by the State of Michigan lab. All 60 samples reported negative for the presence of Total Coliform Bacteria.

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

## 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. The current Iron Removal Plant is nearly 40 years old and has outlived its useful life. In 2012, the City of Leslie also began installing water meters throughout the city.

Thank you for allowing us to continue providing your family with clean, quality water. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected in our rate structure. Thank you for understanding.

*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.

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**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   
**Brian Reed**

**Title: City Manager    Date Distributed: 6-22-13**

**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>**

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### ***Monitoring Requirements Not Met for the City of Leslie***

*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. During 2012 we did not complete all monitoring for chemical contaminants by a September 30, 2012 deadline and therefore cannot be sure of the quality of our drinking water during that time.*

**What should I do?** There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time.

The table below lists the contaminant(s) we did not properly test for during 2012, how often we are supposed to sample for these contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we collected or will collect followup samples.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were (or will be) taken
Partial Chemistry <sup>1</sup>	1 sample per year	1	01/01/12 to 9/30/12	12/12/12

**What happened? What is being done?** Due to operation oversight, the September 30<sup>th</sup> deadline for the annual partial chemistry sample at our plant tap was missed. A sample was collected before the end of the year in which all results met acceptable limits.

For more information, please contact Mr. Brian Reed, City Manager, City of Leslie, 106 E Bellevue St., PO Box 496, Leslie, MI 49251-0496 or 517-589-8236.

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<sup>1</sup> Partial Chemistry compounds are tested by collecting one sample and testing that sample for Nitrate and possibly Nitrite, Fluoride, Sodium and other parameters, depending on the laboratory used. Sampling for Nitrite, Fluoride and Sodium may be required less frequently than for Nitrate, but all these compounds may be tested for during a Partial Chemistry analysis.

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:  Title: City Manager Date Distributed: June 29, 2013