

# LOGAN WATER QUALITY REPORT 2015

The City of Logan has a current, unconditioned license to operate our water system. The City of Logan has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. This report is required as part of the Safe Drinking Water Act Reauthorization of 1996 and is required to be delivered to the consumers by July 01, 2016. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

## Source

Logan's source water is considered a ground water supply by EPA guidelines. The source water comes from a sand and gravel aquifer (water rich zone) that runs along the Hocking River. The City has two well fields that pull from this aquifer. Three wells are east and three wells are west of State Route 93. Logan water treatment plant has a backup power generator for use when the normal power supply is interrupted.

## SOURCES OF CONTAMINATION TO DRINKING WATER

EPA mandates the following information for inclusion in this report.

The sources for drinking water; both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include: (a) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural runoff and wildlife; (b) inorganic contaminants, such as salts and metals, which occur naturally or may result from urban storm water runoff, industrial or domestic wastewater discharges, and farming; (c) pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses; (d) 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, storm water runoff, and septic systems; and (e) radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which 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. 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 does possess 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 (1-800-426-4791).

## Source Water Assessment and Protection Susceptibility Analysis

Ohio EPA recently completed a study of the City of Logan's source drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer that supplies water to the City of Logan has a high susceptibility to contamination. This determination is based on the following:

1. Lack of a protective layer of clay overlying the aquifer;
2. Shallow depth (less than 20 feet below ground surface) of the aquifer;
3. Presence of numerous significant potential contaminant sources in the protection area.

The risk of future contamination can be minimized by implementing appropriate protective measures. For more information about the source water assessment or what consumers can do to help protect the aquifer is available by calling 740-385-5194.

## **WHO NEEDS TO TAKE PRECAUTIONS?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as persons with cancer who are undergoing chemotherapy; people who have undergone organ transplants; people with HIV/AIDS or other immune system disorder; some elderly; and infants can be particularly at risk for infection. 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## **HOW DO I PARTICIPATE IN DECISIONS CONCERNING MY DRINKING WATER?**

Resident and employee participation and comments are encouraged at any time. Please contact Water Plant Superintendent, Chester Smith at (740)385-5194 with your inquiries. Also, questions and concerns can be brought before the Logan City Council which meets the second and fourth Tuesday of each month at City Hall, 10 S. Mulberry Street at 8:00p.m. The City of Logan is also equipped with a water system emergency phone line which can be reached by dialing (740)380-1644.

## **ABOUT YOUR DRINKING WATER**

### **About Your Drinking Water**

The EPA requires regular sampling to ensure drinking water safety. The City of Logan conducted sampling for bacteria, nitrate, arsenic, and haloacetic acids (HAA5) and total trihalomethanes (TTHM) in 2015. No bacterial-positive contaminants were detected during sampling. The Ohio EPA requires water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

**Table of Detected Contaminants**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contamination
Nitrate (ppm)	10	10	0.42	.42-.42.	No	2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride (ppm)	4	4	1.1	0---1.1	No	2012	Erosion of natural deposits; Water additive, promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium (ppm)	2	2	0.418	N.A.	No	2015	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Arsenic (ppm)	10	10	3.0	3.0---3.0	No	2015	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Mercury (ppb)	2	2	0.5	0.5--0.5	No	2015	Discharge of drilling wastes; Discharge from refineries and factories, Runoffs from landfills Runoffs from crops, Erosion of natural deposits.
Lead (ppm)	0	Action Limit= 15	5--- 6.9	N.A.	No	2015	Corrosion of household plumbing systems; Erosion of natural deposits.
Zero of the twenty lead samples exceeded the action level of 15							
Copper (ppm)	1.3	Action Limit= 1300	50---134	N.A.	No	2015	Corrosion of household plumbing ; Erosion of natural deposits; Leaching from wood preservatives.
Zero of the twenty copper samples exceeded the action level of 1300 ppb							
<b>Residual Disinfectants</b>							
Chlorine (ppm)	4	MRDL=4	1.01	.87---1.12	No	2015	Water additive to control Microbes
Trihalomethanes THMs)(ppb)	N.A.	80	21.2	20.4--1.9	No	2015	By-product of drinking water chlorination
Haloacetic Acids HAA5)(ppb)	N.A.	60	6.0	6.0---.0	No	2015	By-product of drinking water chlorination

## Lead Educational Information

“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 Logan 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 at <http://www.epa.gov/safewater/lead>. ”

### DEFINITIONS of TERMS

**Maximum Contaminant Level Goal or MCLG:** 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.

**Maximum Contaminant Level or MCL:** 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.

**Parts per Million(ppm):** Are units of measure for concentration of a contaminant. A part per million (ppm) corresponds to one ounce in 7,350 gallons of water.

**Parts per Billion (ppb):** Are units of measure for concentration of a contaminant. A part per billion (ppb) corresponds to one ounce in 7,350,000 gallons of water.

**Picocuries per Liter (pCi/L):** A unit of measure of radioactivity. One picocurie of radioactivity is equivalent to 0.037 nuclear disintegrations per second.

**The “<” Symbol:** A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

**Not Applicable (N.A.):** No information could be applied to that particular section.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Non Detect (ND):** A result of ND means the particular substance was not detected in the sample.