

Lisbon Water Department
Drinking Water Consumer Confidence Report
For 2016

The **Lisbon Water Department** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. 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.

The Village of Lisbon receives its drinking water from 6 municipal wells. The ground water used by the Village of Lisbon has a high susceptibility to contamination because the water table lies at a shallow depth and the aquifer lacks a substantial covering of clay or less permeable bedrock layers. Also, persistent water quality concerns suggest rapid infiltration of precipitation into the aquifer. This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is high, compared to other ground water systems. This likelihood can be minimized by implementing protective strategies. Due to this susceptibility to contamination, the Village constructed the new micro-filtration plant that has been in operation since August 2007.

The water pumped from the wells goes through an induced draft aerator to help remove hydrogen sulfide, iron and manganese from the water. The water then gravity flows to the treatment plant where we inject small amounts of chlorine and potassium permanganate. The former helps eliminate any microbial contaminants and the latter further reduces iron and manganese levels. The water then passes through iron removal filters and into the new micro-filtration system. The finished/treated water meets all EPA requirements.

Water produced from the micro-filtration process is collected into a 200,000 gallon clearwell at the water treatment plant and used to pump into the distribution system when needed. The Village has two finished water storage tanks in the distribution system. One is located north of the village with a holding capacity of 380,000 gallons and one south of the village with a holding capacity of 330,000 gallons.

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 dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from 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 livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban 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, urban storm water runoff, and septic systems; (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, USEPA 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 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 (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 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).

The EPA requires regular sampling to ensure drinking water safety. The Lisbon Water Department has conducted sampling for multiple contaminants. Samples were collected for different contaminants, most of which were not detected in the Village of Lisbon water supply. The Ohio EPA requires us 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, may be more than one year old.

We have a current, unconditional license to operate our water system.

Definitions

Maximum Contaminant Level Goal (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 (MCL): The highest level of 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) – or one ounce in 7,350 gallons.

Parts per Billion (ppb) – or one ounce in 7,350,000 gallons.

Maximum Residual Disinfectant Level – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant level allowed.

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

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

Listed below is information on those contaminants that were found in the Village of Lisbon drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Highest Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Microbiological – The Village collects a minimum of 3 bacteria samples per month. All samples collected in 2016 were negative for bacteria.							
Inorganic Contaminants							
Barium (ppm)	2.0	2.0	0.103	0.103 - 0.103	NO	2014	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.
Disinfectants and Disinfection By-Products	MCLG	MCL	Highest Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Haloacetic Acids (HAA5) (ppm)	NA	60	6.24	4.37 – 6.24	NO	2016	By-product of drinking water chlorination.
Total Trihalomethanes (TThm) (ppb)	NA	80	19.0	11.2 – 19.0	NO	2016	By-product of drinking water chlorination.
Disinfectants and Disinfection By-Products	MCLG	MCL	Highest Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Total Chlorine (ppm)	4.0	4.0	1.4	0.4 – 1.4	NO	2016	Water additive used to control microbes.
Lead and Copper	90th Percentile	# of Samples over AL	MCLG	MCL	Violation	Sample Year	Typical Source of Contaminants
Lead (ppb)	1.38	0 AL-155	0	15	NO	2015	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (ppm)	0.07	0 AL-1.35	1.3	1.3	NO	2015	Corrosion of household plumbing systems; Erosion of natural deposits.

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 Lisbon Water Department 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Public participation and comment are encouraged at regular meetings of the Board of Public Affairs which usually meets twice each month at Village Hall prior to the Village Council meeting. For dates and times, please contact the office at 330-424-3521, extension 1850 or 1851.

For more information on your drinking water contact Paul McCarthy or Mike Ours at 330-424-3521, extension 1850 or 1851.

WATER CONSERVATION PRACTICES

Water conservation practices help save the supply of water. Water is a precious resource and must be used wisely. There are a number of measures you can take to conserve on water usage.

1. Fix leaking faucets, pipes, toilets, etc.
2. Install water saving devices. It could reduce your water consumption and lower your bill.
3. Do full loads of laundry.
4. Take shorter showers and turn water off while shaving or brushing teeth.
5. Load automatic dishwasher to capacity before running it.