

LEETONIA PUBLIC WORKS

2021 ANNUAL DRINKING WATER REPORT

The Village of Leetonia 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.

WATER SOURCE

The Village of Leetonia started receiving all its drinking water from the City of Salem, Ohio, on August 18, 2008 which is treated surface water from Cold Run Creek, Salem East Cold Run Reservoir, Spring Valley Reservoir and 4 ground water wells taken from a well field adjacent to Cold Run Creek. Our drinking water is purchased on a daily basis through a master meter located at the intersection of Butcher Road and Lisbon Canfield Road.

The Salem City water system is a combined surface water and groundwater system. For the purposes of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are accessible and can be easily contaminated by chemicals and pathogens. Also compared to ground water, they tend to move more swiftly, so an upstream spill may rapidly arrive at the public drinking water intake with little warning or time to prepare. Therefore, the drinking water supplied to the Salem City public water system has a high susceptibility to contamination. The City of Salem's water source is relatively more susceptible than many surface waters because of significant agriculture land use in and around the source water protection area and corridor management zone for the surface water bodies that provide water to the system.

The Salem City public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Cold Run Creek, Spring Valley Reservoir, and Salem reservoir. The risk of future contamination can be minimized by implementing appropriate protective measures. For more information about the source water assessment, please contact the Salem Water Plant Manager at 330-222-1531.

The Village of Leetonia, Ohio Public Water Supply meets or exceeds established "Water Qualities Standards" of the federal Safe Drinking Water Act (SDWA) requirements for "Consumer Confidence Reports" and the report contains information on the source of our water, its constituents, and the public health risks associated with the constituents if found in violation of the federal and state standards as mandated by the Safe Drinking Water Act (SDWA). Safe water is vital to our community. Please read this report carefully and if you have any questions, call the person(s) at the numbers listed below.

What are sources of contamination to drinking water?

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 Safe Drinking Water Hotline (1-800-426-4791).

Who needs to take special precautions?

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).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The **Village of Leetonia** conducted sampling for *bacteria, total chlorine, lead, copper, trihalomethanes, and haloacetic acids* during 2021. Samples were collected for a total of 6 different contaminants most of which were not detected in the Leetonia 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, are more than one year old.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of the filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported below the Salem Water Plant highest recorded turbidity result for 2021 was 0.08 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Lead 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 Leetonia Water Dept. 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>.

Testing for Cryptosporidium

The City of Salem monitored for *Cryptosporidium* in the raw water during 2018. *Cryptosporidium* was detected in 2 out of 24 samples. *Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. The monitoring of source water and/or finished water indicated the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

The Village of Leetonia has a current, unconditioned license to operate our water system from OEPA. Our PWS ID number is OH 1501412.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Village Council which meets the **first** and **third Wednesday** every month at 6:30 PM in council chambers of the lower level of 300 East Main St., Leetonia, Ohio. For more information on your drinking water contact **Chad Hess at 330-427-8087**.

Listed in the following table is information on those contaminants that were found in the **Leetonia/Salem** drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL Or TT	Level Found	Range of Detections Low High		Violation	Sample Year	Typical Source of Contaminants
Bacteriological Samples taken by Leetonia Water Dept. in Leetonia Distribution System								
Total Coliform Bacteria (# of positive samples)	0	1	0	N/A		No	2021	Naturally present in the environment
Inorganic Contaminants Samples Taken at Salem Water Plant by Salem								
Fluoride (ppm)	4	4	1.08	0.83	1.24	No	2021	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.00	0.18	1.00	No	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Barium (ppm)	2	2	0.019	N/A	N/A	No	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Filtration Samples taken at Salem Water Plant by Salem								
Turbidity (NTU)	N/A	TT	0.08	0.02	0.08	No	2021	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	N/A	TT	100	N/A	N/A	No	2021	Soil runoff
100% of the turbidity samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.080. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Total Organic Carbon [TOC] % removal)	N/A	TT	1.60	1.03	3.13	No	2021	Naturally present in the environment
The value reported under "level found" for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC actually removed to the percentage of TOC required to be removed. A value greater than 1 indicated that the water system is in compliance with TOC removal requirements. A value less than one indicated a violation of the TOC removal requirements.								
Disinfection by-Products taken in Leetonia Distribution by Leetonia								
Total Trihalomethanes [TTHM] (ppb)	0	80	33	14.8	29.5	No	2021	By-product of drinking water disinfection
Haloacetic Acids[HAA5](ppb)	0	60	29	7.27	38.1	No	2021	By-product of drinking water disinfection
Residual Disinfectants Sample Taken in Leetonia Distribution by Leetonia								
Chlorine (ppm)	4	4	0.9	0.80	0.9	No	2021	Water additive used to control microbes
Lead and Copper taken in Leetonia Distribution by Leetonia								
Contaminants (Units)	Action Level	Individual Results over the AL	90% of test levels were less than		Violation	Year Sampled	Typical Source of Contaminants	
Lead (ppb)	15	0	5.23		No	2021	Corrosion of household plumbing systems, erosion of natural deposits	
1 sample out of 10 were found to have lead levels in excess of the lead action level of 15 ppb.								
Copper (ppm)	1.3	0	0.0876		No	2021	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
0 samples out of 10 were found to have copper levels in excess of the copper action level of 1.3 ppm.								

Other Unregulated Substances

City of Salem

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range of Detections		Typical Source
			Low	High	
HAA5 (ppb)	2021	43.08	19.8	60.9	N/A
HAA6Br (ppb)	2018	8.45	5.287	13.49	N/A
HAA9 (ppb)	2018	46.64	17.727	61.94	N/A
Saxintonins (ppb)	2019	N/A	< 0.0220	0.0319	N/A

Correction to Salem's Tests on Water

Atrazine	2021	0.089	0.089	0.089	Runoff from herbicide used on row crops
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Definitions of some terms contained within this report.

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 Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): 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.

Removal Ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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.