

Village of West Salem

Drinking Water Consumer Confidence Report

For 2023

Introduction

The West Salem 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.

Source Water Information

The West Salem Water Department receives its drinking water from wells owned and operated by the Village of West Salem located within the Killbuck Creek aquifer system.

The West Salem Water Department also has an emergency connection with Lorain Rural Water. During 2023 we used our connection with Lorain Rural Water Authority from October 16th 2023 through December 10th 2023, using approximately 11,160,600 gallons of water while our water tower was being painted. Included in the report is a table of detectable contaminants for water sourced from Lorain Rural Water Authority.

The State has performed an assessment of our source water in 2010 and revised in 2015. It was determined that the aquifer supplying drinking water to the Village of West Salem has a moderate susceptibility to contamination. This conclusion is based on the presence of a moderately thick protective layer of clay overlying the aquifer, no evidence to suggest that ground water has been impacted by any significant potential contaminant sources in the protection area. Please call Cody Pitsenbarger 330-465-7449 if you would like more information about the assessment.

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 Federal Environmental Protection Agency's 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).

Corrections for 2022 CCR

- A. The 90th percentile for copper was incorrect and made the level found appear many times the action level for copper of 1.3 ppm. The correct value is 0.148 ppm
- B. The level found for barium was incorrect and made barium levels appear to be more than twice the MCL of 2 ppm. The correct level found for barium is .0046 ppm
- C. The level found for nitrite is incorrect and should be .003 ppm

About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The **West Salem Water Department** conducted sampling for bacteria, Lead and Copper, Disinfection By-products, Nitrate, Nitrite, and Volatile Organic Chemicals during **2023**

How to read the water quality data table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table below shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table.

Listed below is information on those contaminants that were found in the **Village of West Salem** drinking water.
TABLE OF DETECTED CONTAMINANTS

OH8504311		Village of West Salem						
Contaminants	MRDLG	MRDL	Level Found	Range of Detection	Units	Sample Year	Violation	Typical Source
Residual Disinfectants								
Chlorine (as cl2)	4	4	1.125	.5 - 1.8	ppm	2023	NO	Water additive used to control microbes
	MCLG	MCL						
Inorgani Contaminants								
Flouride	4	4	1.21	.75 - 1.31	ppm	2023	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilzer and aluminum factories
Nitrate	10	10	0.192	N/A	ppm	2023	NO	Runoff from fertilizer use, leaching from septic tanks; Erosion of natural deposits
Nitrite	1	1	0.03	N/A	ppm	2023	NO	Runoff from fertilizer use, leaching from septic tanks; Erosion of natural deposits
Barium	2	2	0.0046	N/A	ppm	2022	NO	Discharge of drilling waste, Discharge from metal refineries; Erosion of natural deposits
Dissinfection byproducts								
TTHM	N/A	80	44	38.3-49.3	ppb	2023	NO	By-product of drinking water chlorination
							NO	By-product of drinking water chlorination
HAA5	N/A	60	11	9.5-11.5	ppb	2023	NO	By-product of drinking water chlorination
							NO	By-product of drinking water chlorination
Radioactive Contaminants								
Combined Radium 226/228	0	5	2.0 _± .8	2.0 _± .8	pCi/L	2019	NO	Erosion of natural deposits
Gross Alpha excluding Radon & Uranium	0	15	1.2 _± 1.3	1.2 _± 1.3	pCi/L	2019	NO	Erosion of natural deposits
Lead and Copper	Collection Date	90th Percentile	# of Samples Over AL	MCLG	Action Level (AL)	Violation	Units	Likely Source of Contamination
Copper	2023	0.177	0	1.3	1.3	NO	ppm	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing
Lead	2023	2.4	0	0	15	NO	ppb	corrosion of household plumbing; Erosion of natural deposits

List of detectable contaminants for Lorain Rural Water Authority

Regulated Contaminants Monitoring for Avon Lake Municipal Utilities, City of Ashland and Village of New London											
CONTAMINANTS (UNITS)	MCLG [MRDLG]	MCL [MRDL]	Avon Lake Municipal Util.		City of Ashland		Village of New London		VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINANTS
			LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS			
MICROBIOLOGICAL CONTAMINANTS											
TURBIDITY (NTU)	N/A	TT	0.2	0.02 - 0.20	N/A	N/A	0.36	0.05 - 0.36	NO	2023	SOIL RUNOFF
TURBIDITY (% SAMPLES MEETING STANDARD)	N/A	TT	100%	100%	N/A	N/A	100%	100%	NO	2023	SOIL RUNOFF
TOTAL ORGANIC CARBON (TOC)	N/A	TT	1.32	1.0 - 1.7	N/A	N/A	1	1.00 - 1.40**	NO	2023	NATURALLY PRESENT IN THE ENVIRONMENT
INORGANIC CONTAMINANTS											
BARIUM (PPM)	2	2	0.02	N/A	N/A	N/A	0.0314	N/A	NO	2023	DISCHARGE OF DRILLING WASTES; DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS
FLUORIDE (PPM)	4	4	0.69	0.69 - 1.20	1.04	1.04 - 1.04	.96	0.82 - 1.22	NO	2023	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES
NITRATE (PPM)	10	10	0.96	0.134 - 0.96	0.364	.364 - .364	0.66	0.10 - 0.66	NO	2023	RUN OFF FROM FERTILIZER USE, LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS
SYNTHETIC ORGANIC CONTAMINANTS											
Atrazine (PPB)	3	3	N/A	N/A	N/A	N/A	0.12	0.1 - 0.12	NO	2022	RUNOFF FROM HERBICIDE USED ON ROW CROPS
RADIOACTIVE CONTAMINANTS											
Radium (combined 226/228) (pCi/L)	0	5	N/A	N/A	0.189***	N/A	1.04	N/A	NO	2018	EROSION OF NATURAL DEPOSITS
Alpha Emitters (pCi/L) ³	0	15	N/D	N/A	N/A	N/A	5.4	N/A	NO	2018	EROSION OF NATURAL DEPOSITS

** Testing was completed in 2020

*** Testing was completed in 2014

Testing Results for Rural Lorain County Water Authority							
Substance (Units)	ACTION LEVEL (AL)	INDIVIDUAL RESULTS OVER THE AL	90% OF TEST LEVELS WERE LESS THAN	VIOLATION	YEAR SAMPLED	TYPICAL SOURCE OF CONTAMINANTS	
LEAD AND COPPER							
LEAD (PPB)	15 PPB	NA	<2.0	NO	2023	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS	
ZERO OUT OF 32 SAMPLES WERE FOUND TO HAVE LEAD LEVELS IN EXCESS OF THE LEAD ACTION LEVEL OF 15 PPB							
COPPER (PPM)	1.3 PPM	NA	0.0492	NO	2023	EROSIONS OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES; CORROSIONS OF HOUSEHOLD PLUMBING SYSTEMS	
ZERO OUT OF 32 SAMPLES WERE FOUND TO HAVE COPPER LEVELS IN EXCESS OF THE COPPER ACTION LEVEL OF 1.3 PPM							
CONTAMINANTS (UNITS)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINANTS
DISINFECTANTS AND DISINFECTION BYPRODUCTS							
TOTAL CHLORINE (PPM)	MRDLG=4	MRDL=4	0.844167	0.531 - 1.0004	NO	2023	WATER ADDITIVE USED TO CONTROL MICROBES
HALOACETIC ACIDS (HAAS) (PPB)	NA	60	38	7 - 48.6	NO	2023	BY-PRODUCT OF DRINKING WATER DISINFECTION
TOTAL TRIHALOMETHANES (TTHM) (PPB)	NA	80	59.825	19.2 - 79.8	NO	2023	BY-PRODUCT OF DRINKING WATER DISINFECTION

Rural Lorain County Water Authority Drinking Water Notice
Monitoring requirements not met for Rural Lorain County Water Authority.

We are required to monitor your drinking water for corrosion control indicators. During the July-December 2023 monitoring period, Rural Lorain County Water Authority failed to collect water quality parameter samples at the correct frequency required by Ohio EPA.

What should I do?

This notice is to inform you that Rural Lorain County Water Authority did not monitor for corrosion control indicators at the appropriate frequency as required by Ohio EPA during the July – December 2023 monitoring period. You do not need to take any action in response to this notice.

What is being done?

Rural Lorain County Water Authority will take steps to ensure that adequate monitoring will be performed in the future.

For more information, please contact Joseph Waldecker at 440-355-5121 or at 42401 State Route 303, Lagrange, OH 44050.

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 Village of West Salem* 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>.

License to Operate (LTO) Status Information

In 2023 we had an unconditioned license to operate our water system.

Public Participation Information

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of *the Village of West Salem* which meets the 2nd Wednesday of every month at 6:00pm. For more information on your drinking water contact Cody Pitsenbarger 330-465-7449. Printed copies of this report are available upon request.

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.

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

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.

Picocuries per liter (pCi/L): A common measure of radioactivity

90th percentile means 90% of the samples are equal to or less than the number on the chart

What is a Cross Connection?

A cross-connection is an actual or potential connection between the safe drinking water (potable) supply and a source of contamination or pollution.

BACKSIPHONAGE: May occur due to a loss of pressure in the municipal water system during a fire fighting emergency, a water main break or system repair. This creates a siphon in your plumbing system which can draw water out of a sink or bucket and back into your water or the public water system.

BACKPRESSURE: May be created when a source of pressure such as a toilet creates a pressure greater than the pressure supplied from the public water system. This may cause contaminated water to be pushed into your plumbing system through an unapproved cross-connection.

Water normally flows in one direction. However, under certain conditions, water can actually flow backward; this is known as Backflow. There are two situations that can cause water to flow backward: backsiphonage and backpressure.

AVOIDING BACKFLOW THROUGHOUT THE HOME

BATHTUB & SHOWER FIXTURES

A handheld shower fixture is compliant if:

- When shower head is hanging freely, it is at least 1" above top of the flood level rim of the bathtub
- Complies with ASSE#1014
- Has the ASME code A12.1B1 stamped on the handle

BOILERS

Boilers with chemical additives require an ASSE #1012 – Reduced Pressure Principle Backflow Prevention Assembly.

TOILET TANKS

There are many unapproved toilet tank fill valve products sold at common retailers which do not meet the state plumbing code requirements for backflow prevention.

- Look for the ASSE #1002 Standard symbol on the device and packaging.
- Replace any unapproved devices with an ASSE #1002 approved anti-siphon fill valve device. Average cost is typically \$12 to \$22 at home improvement stores.
- Verify overflow tube is one inch below critical level (CL) marking on the fill valve.

ELSEWHERE IN THE HOME

Always maintain an air gap of at least 1 inch between the end of drain hoses and the highest potential water level.

HOME EXTERIOR

Verify all outside faucets are protected with a hose bibb vacuum breaker of the ASSE-certified types shown below.

ASSE #1011

INTERIOR USE

ASSE #1011 Frost Free

EXTERIOR USE

ASSE #1011

EXTERIOR USE