



2021 DRINKING WATER QUALITY REPORT VILLAGE OF ENON

ENON WATER SYSTEM

The Village Administrator, under the direction of the Enon Village Council, operates and maintains the Village of Enon Water Works System. Public participation and comment are encouraged at regular Village of Enon Council meetings on the second and fourth Tuesday of each month at 7:00 PM. Meetings are held at the Enon Government Center located at 363 East Main Street. For more information regarding the water system, you may contact the Water Superintendent at 937-864-7870.

EPA REQUIREMENTS

The EPA requires us to test Enon's drinking water on a regular basis to ensure its safety. During the year of 2021, Enon Water Works System has maintained a current unconditioned license to operate. Enon had no Ohio EPA Monitoring Violations in 2021. All samples were collected per EPA requirements and the results are available upon request. Some of our data, though accurate, is more than one year old.

WHY ARE THERE CONTAMINANTS IN MY WATER?

(1) 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 materials, and can pick up substances resulting from the presence of animals or from human activity.

(2) 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 fracking. (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. They 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.

(3) 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 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 (800) 426-4791.

WHERE DO WE GET OUR DRINKING WATER?

The Enon Well Field is located on Enon Road just south of Interstate 70. This underground source of water is part of the Mad River Buried Valley Aquifer. Enon's four wells produced an average of 599,830 gallons per day in 2021.

DO I NEED 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 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 microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

TABLE OF DETECTED CONTAMINANTS FOR 2021

Definitions:

- **MCL**: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.
- **MCLG**: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **MRDL**: Maximum Residual Disinfection 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.
- **MRDLG**: Maximum Residual Disinfection Level Goal. 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.
- **AL**: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **TT**: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations:

- * **ug/L**: parts per billion or micrograms per liter
- * **N/A**: not applicable
- * **ND**: not detectable at testing limits
- * **MFL**: million fibers /liter, used to measure asbestos

- * **mg/L**: parts per million or milligrams per liter
- * **LRAA**: Locational Running Annual Average
- * **PCi/L**: Picocuries per liter (measure of radioactivity)



TABLE OF DETECTED CONTAMINANTS FOR 2021 (continued)

Type of Contaminants	Date Sampled	Level Found	Range of Detections	MCLG	MCL	Violation	Typical Source of Contaminant
Inorganic Contaminants							
Barium (mg/l)	01/27/2020	0.0907	0.0907-0.0907 mg/l	2	2	No	Discharge of drilling waste, metal refineries; Erosion of natural deposits
Fluoride (mg/l)	2020 daily	1.120 mg/l	0.84-1.26 mg/l	4 mg/l	4 mg/l	No	Erosion of natural deposits; Water additive which promotes strong teeth.
Nitrate (mg/l)	02/21/2021	4.0 mg/l	4.0-4.0 mg/l	10 mg/l	10 mg/l	No	Run off of fertilizer use; leaching from septic tanks, erosion of natural deposits
Residual Disinfectants							
Total Chlorine (mg/l)	2021 running annual average	0.91 mg/l	0.64 - 1.15 mg/l	MRDLG 4.0 mg/l	MRDL 4.0 mg/l	No	Water additive used to control microbes.
Radiological (Pci/L)							
Gross Alpha	1 sample	3.26 pCi/L	N/A	0.0 pCi/l	15 pCi/l	No	Erosion of natural deposits

Volatile Organic Contaminants (VOC)	Date Sampled	Level Found	Range of Detections	MCLG	MCL	Violation	Typical Source of Contaminant
Tetrachloroethene (ug/l)	07/06/2021	0.73 ug/l	ND – 1.3 ug/l	0.0 ug/l	5.0 ug/l	No	Discharge from factories and dry cleaners
Trichloroethene (ug/l)	07/06/2021	0.16 ug/l	ND – 0.63 ug/l	0.0 ug/l	5.0 ug/l	No	Discharge from metal degreasing sites and other factories
cis-1,2 dichloroethene (ug/l)	07/06/2021	0.19 ug/l	ND - 0.75 ug/l	0.0 ug/l	70.0 ug/l	No	Discharge from industrial chemical factories
Disinfection Byproducts							
	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
Total Trihalomethanes ug/l	N/A	80 ug/l	7.8 ug/l	4.5 – 7.8 ug/l	No	2021	By-product of drinking water chlorination.
Haloacetic Acids HAA5 ug/l	N/A	60 ug/l	4.3 ug/l	3.9 – 4.3 ug/l	No	2021	By-product of drinking water chlorination.

Lead and Copper (Distribution System)							
Contaminants	Action Level (AL)	Individual Results over AL	90% of test levels were less than:	Violation	Year Sampled	Typical Sources of Contaminants	
Lead (ug/l)	15 ug/l	Zero	4.0 ug/l	No	2020	Corrosion of household plumbing systems; Erosion of natural deposits.	
	One (1) out of 10 samples was found to have lead levels in excess of the lead action level of 15 ug/l.						
Copper (mg/l)	1.3 mg/l	Zero	0.141 mg/l	No	2020	Corrosion of household plumbing systems; Erosion of natural deposits.	
	Zero of 10 samples were found to have copper levels in excess of the copper action level of 1.3 mg/l.						

SUSCEPTIBILITY ANALYSIS

Ohio EPA recently completed a review of the Village of Enon’s source of 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 Village of Enon has a high susceptibility to contamination. This determination is based on the following:

1. The lack of a protective layer of clay overlying the aquifer near Enon Park; and
2. The shallow depth (less than 15 feet below ground surface) of the aquifer; and
3. The presence of significant potential contaminant sources in the protection area; and
4. The presence of manmade contaminants in water samples. Nitrate and some organic compounds were detected in the raw water at levels of concern between 1995 and the present, but at concentrations which are well below the federal and state drinking water standards.

This indicates that human activities have influenced the aquifer’s water quality. The risk of future contamination can be minimized by implementing appropriate protective measures. With the development of Well #4, the Village of Enon had also approved EPA Drinking Water Source Protection Program for its entire well field. More information is available by calling Enon Government Center at 864-7870.

PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)

In 2020, our Public Water Supply (PWS) was sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit the PFAS website at pfas.ohio.gov.

PFAS are a group of man-made chemicals applied to many industrial, commercial, and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

NITRATE INFORMATION

Nitrates in drinking water at levels above 10.0 ppm are a health risk for infants under 6 months of age. High Nitrates in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agriculture activity. If you are caring for an infant you should ask for advice from your health care provider.

LEAD INFORMATION

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Enon 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 drinking or cooking. If you are concerned about lead in your water, you may wish your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

ABOUT RADON

The Enon Water Department last monitored for radon in the finished water during 2020; one sample was collected and the Radium 228 radon level was 1.0 pCi/l. This measurement was well below the maximum contaminant level of 5.0 pCi/L. Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Major sources of radon gas are soil and cigarettes. Inhalation of radon gas has been linked to lung cancer, however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on how to have your home tested, call 1-800-SOS RADON.