

OH8701712 Village of Pemberville 2018

DRINKING WATER CONSUMER CONFIDENCE REPORT



The Village of Pemberville Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included with this report is general health information, water quality test results, and how to participate in decisions concerning your drinking water.

Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.

In 2018, the Village Water Department continued to make improvements and upgrades to the water system. We began engineering a few water line replacement projects, and are looking into updating the existing distribution system.

Where does my water come from?

The source of the Village of Pemberville's water is Ground Water. We get the water from eight (8) wells in three (3) well fields. The water is treated in ION exchange units in the two (2) water treatment plants. Both water plants are operated and maintained by one employee with an Ohio EPA Class 1 Water Supply Operator License. To ensure the quality and consistency of the water, the water plants are checked 365 days a year. In 2018 36,849,900 gallons of water was produced for our customers, for a daily average of 100,958 gallons.

A Vulnerability Assessment report was prepared for your water system by the Ohio EPA. The assessment indicates that the Village of Pemberville's source of drinking water has a high susceptibility to contamination because:

- The wells are located in a sensitive karst area;
- The shallow depth (less than 25 feet below ground surface) of the aquifer;
- The shallow well casing depth (25 feet);
- Potential contamination sources exist within the protection area.

This does not mean that the aquifer will become contaminated, only that under the existing conditions ground water could become impacted by contaminant sources. A copy of the DRINKING WATER SOURCE ASSESSMENT for the Village of Pemberville is at the Village Hall or it can be viewed at <http://wwwapp.epa.ohio.gov/gis/swpa/OH8701712.pdf>. The DRINKING WATER SOURCE PROTECTION PLAN and the WATER SUPPLY CONTINGENCY PLAN were both reviewed in 2017. Please contact Village Hall at 419-287-3832 if you would like additional information on this topic.

What are sources of contamination to drinking water?

The sources of drinking water both tap water and bottled water includes 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).

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).

The EPA requires regular sampling to ensure drinking water safety. The Village of Pemberville conducted sampling for Lead and Copper, Asbestos, Total Coliform, Total Chlorine, Inorganics, Nitrite, Nitrate, Radiologicals, Volatile Organic Chemicals, and Disinfection By-Products during 2018. Samples were collected for a total of 54 different contaminants most of which were not detected in the Village of Pemberville's 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.

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 Pemberville 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 tap 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>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

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

How do I participate in decision concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the Board of Public Affairs, which meet the Monday prior to the first and third Tuesday of each month. The meetings are held at 7:00 PM. For more information on your drinking water contact Nathan Schultze at water@villageofpemberville.org

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

OH18701712

PEMBERVILLE VILLAGE WATER

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2018	1.95	0.55 - 1.95	MRDLG = 4	MRDL = 4	ppm	NO	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2018	15.1	8.7 - 15.1	No goal for the total	60	ppb	NO	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)*	2018	60.8	22.9 - 60.8	No goal for the total	80	ppb	NO	By-product of drinking water chlorination.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	6/23/16	0.95	.52 - 0.95	4	4.0	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium	6/23/16	0.0305	0-.0305	2	2	ppm	NO	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits.
Lead and Copper	Year sampled	90% of test levels were less than	Individual results over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contamination
Copper	2018	368	0	1.3	1.3	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
0 out of 10 samples were found to have copper levels in excess of the Action Level of 1.3 ppm.								
Lead	2018	0	0	0	15	ppb	YES	Corrosion of household plumbing systems, Erosion of natural deposits.
0 out of 10 samples were found to have lead levels in excess of the Action Level of 15 ppb								
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross alpha excluding radon and uranium	06/23/16	3.07	0 - 3.07	0	15	pCi/L	NO	Erosion of natural deposits.
Unregulated Contaminants								
Name				Average		Range		
Nickel (ppb)				0.0441		0 - 0.0441		

Unregulated contaminants monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

- **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.
- **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.
- **Picouries per liter (pCi/L):** A common measure of radioactivity.
- **IDSE:** Initial Distribution System Evaluation
- **Action Level(AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- **ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water
- **ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water
- **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

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What is a cross-connection?

Any physical connection created between a possible source of contamination and any drinking water system piping.

What is backflow?

It is the flow through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.

Why be concerned?

- ALL cross-connections pose a potential health risk.
- Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing. Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through cross-connections.
- Backflow occurs more often than you think.
- You are legally responsible for protecting your water supply plumbing from backflow that may contaminate drinking water, either your own or someone else's. This includes complying with the plumbing code and not creating cross-connections.

What causes backsiphonage?

Backsiphonage occurs when there is a loss of pressure in a piping system. This can occur if the water supply pressure is lost or falls to a level lower than the source of contamination. This condition, which is similar to drinking from a glass with a straw, allows liquids to be siphoned back into the distribution system.

What causes backpressure?

Backpressure occurs when a higher opposing pressure is applied against the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter the drinking water supply. Any pumping system (such as a well pump) or pressurized system (such as steam or hot water boilers) can exert backpressure when cross-connected with the public water system.

What can I do?

- Be aware of and eliminate cross-connections.
- Maintain air gaps. Do not submerge hoses or place them where they could become submerged.
- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow preventers on lawn irrigation systems.
- Do not create a connection between an auxiliary water system (well, cistern, body of water) and the water supply plumbing.

What are some common backflow hazards that threaten the homeowner and other consumers?

- Hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides or fertilizers.
- Lawn irrigation systems.
- Chemically treated heating systems.
- Hose connections to a water outlet or laundry tub.
- Swimming pools, hot tubs, spas.
- Private and/or non-potable water supplies located on the property.
- Water-operated sump drain devices.
- Feed lots/livestock holding areas or barnyards fed through pipes or hoses from your water supply plumbing.

What are examples of cross-connection and backflow scenarios?

- Soapy water or other cleaning compounds backsiphon into the water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- Pool water backsiphons into the water supply plumbing through a hose submerged in a swimming pool.
- Fertilizers/pesticides backsiphon into the water supply plumbing through a garden hose attached to a fertilizer/pesticide sprayer.
- Chemicals/pesticides and animal feces drawn into the water supply plumbing from a lawn irrigation system with submerged nozzles.
- Bacteria/chemicals/additives in a boiler system backsiphon into the water supply plumbing.
- Unsafe water pumped from a private well applies backpressure and contaminates the public water supply through a connection between the private well discharge and the potable water supply plumbing.

What must be done to protect the public water system?

The public water supplier must determine potential and actual hazards. If a hazard exists at a customer's public water supply service connection, the customer will be required to install and maintain an appropriate backflow preventer² at the meter and/or at the source of the hazard.

²Check with your water supplier to verify which backflow preventer is required before purchase or installation.

Who is responsible?

In Ohio, the responsibility for preventing backflow is divided. In general, state and local plumbing inspectors have authority over plumbing systems within buildings while Ohio EPA and water suppliers regulate protection of the distribution system at each service connection.

Water customers have the ultimate responsibility for properly maintaining their plumbing systems. It is the homeowner's or other customer's responsibility to ensure that cross-connections are not created and that any required backflow preventers are tested yearly and are in operable condition.

What is the law?

Ohio Administrative Code Chapter 3745-95 requires the public water supplier to protect the public water system from cross-connections and prevent backflow situations. The public water supplier must conduct cross-connection control inspections of their water customers' property to evaluate hazards. Local ordinances or water department regulations may also exist and must be followed in addition to state regulations.