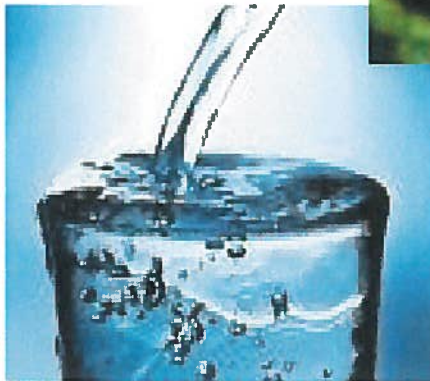


VILLAGE OF  
**DUNKIRK**  
HARDIN COUNTY, OHIO



2018 ANNUAL  
DRINKING WATER  
QUALITY REPORT

**Village of Dunkirk Water Plant**  
**Drinking Water Consumer Confidence Report**  
**PWS#OH3300212**  
**Monitoring Year 2018**

The Village of Dunkirk Water Department has prepared the following report to provide information to you, the consumer, regarding the quality of our drinking water. Included within this report is general health information, water quality results, how to participate in decisions concerning your drinking water and water system contacts. In 2018 the Village of Dunkirk had an unconditioned license to operate the water system.

**Source Water Information**

The Village of Dunkirk Water Plant receives its drinking water from 2 wells that are drilled 210 feet into the ground. These 2 wells produce between 105 and 160 gallon / minute. These wells are located at 201 W. Geneva St. at the Dunkirk Water Plant. Both wells are in the regional Silurian-Age Carbonate Aquifer.

**What are sources of contamination in drinking water?**

The sources of drinking water, both tap water and bottled, include streams, lakes, rivers, 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 waste water 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 byproducts 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 insure the tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public drinking water system. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Ohio Environmental Protection Agency's Safe Drinking Water Hotline at 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. Immune-compromised persons, 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 at 800-426-4791.

### **About your drinking water**

The OEPA requires regular sampling to ensure drinking water safety. The Village of Dunkirk Water Department routinely monitors for contaminants according to federal and state laws. The table included shows the results of our monitoring for the period through December 31 of the year reported.

The OEPA recently completed a study of The Village of Dunkirk'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 (water-rich zone) that supplies water to The Village of Dunkirk has a high susceptibility to contamination. This determination is based on the following:

- Presence of a relatively thin protective layer of clay overlying the aquifer
- Shallow depth (6-8 feet below ground surface) of the aquifer
- The wells are located in a sensitive potential karst area, and
- Presence of potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment of what consumers can do to help protect the aquifer is available by calling Superintendent Dale Albert at 419-679-8601.

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 metals and components associated with service lines and home plumbing. The Village of Dunkirk 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 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 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The Village of Dunkirk has completed a Wellhead Protection Plan, which is available for public review. This plan identifies risks to our ground water system, the boundaries and size of our underground aquifer, and direction of flow of water to the Village of Dunkirk's potable well field. Appointments to review the plan can be made by calling the water plant at 419-759-2102.

If you have any questions about this report or concerning your water quality, please contact Dale Albert at 419-679-8601. You can participate in decisions regarding your water by attending a Board of Public Affairs meeting held on the 2<sup>nd</sup> and 4<sup>th</sup> Mondays of the month at 5:00 p.m. at the town hall located at 201 N. Main St, Dunkirk, Ohio.

**VILLAGE OF DUNKIRK PWS #OH3300212  
2018 TABLE OF DETECTED CONTAMINANTS**

Disinfectants and Disinfection By-Products	Collection Date	Level Found	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
CHLORINE	2018	0.42	.40 - .46	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes

TOTAL TRIHALOMETHANES (TTHM) 9-Jul-18 22.4 NO GOAL FOR 80 ppb N By-product of drinking water disinfection.  
THE TOTAL

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
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FLUORIDE 9-Jan-18 1.67 1.67 - 1.67 4 ppm N Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

NITRATE 9-Jan-18 0.45 0.45 10 ppm N Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper	Collection Date	90th Percentile	# of Samples Over AL	MCLG	Action Level (AL)	Units	Violation	Likely Source of Contamination
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Copper 2-Aug-18 0.45 0 1.3 1.3 ppm N Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Lead 2-Aug-18 0 0 15 ppm N Corrosion of household plumbing systems; Erosion of natural deposits.

**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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**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.