

# Drinking Water Consumer Confidence Report

2018

## VILLAGE OF CADIZ

The Village of Cadiz Public Water System 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.

The Village of Cadiz public water system uses surface water from Tappan Lake, which was created by impounding Little Stillwater Creek. For the purpose of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemical and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare. The drinking water source protection area is predominantly deciduous forest and contains relatively few potential contaminant sources. These include oil and gas wells, mined areas, residential septic systems, agricultural activities, and road crossings.

The Village of Cadiz public water system treats the water to meet drinking water quality standards but no single treatment technique can address all the potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Tappan Lake and its watershed. More detailed information is provided in the Village of Cadiz Drinking Water Assessment Report, which can be obtained by calling Keith Grewell at 740-942-3884.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Hotline (800-426-4791).

The Village of Cadiz public water system also has an Emergency connection with the Village of Hopedale. During 2018 no water was used from this connection. This connection is normally not used and is in place only for emergency situations. This report does not contain information on the water quality received from the Village of Hopedale, but a copy of their consumer confidence report can be obtained by contacting Don at Hopedale Public Water System 740-457-9201.

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 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).

The EPA requires regular sampling to ensure drinking water safety.. The Village of Cadiz Public Water System conducted sampling for bacteria, inorganic contaminants, radiological, synthetic organic, and volatile organic contaminants during 2018. Samples were collected for over 30 contaminants most of which were not detected in the Village of Cadiz Public Water System 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.

In 2018 several Notice of Violations were given to the Village of Cadiz Public Water System including (1) Ten State Standard 3.1.4.2 (f) which states "Raw water pumping wells shall have intake valves and provisions for back flushing or cleaning by a mechanical device and testing for leaks." This was because of an inoperable valve at the intake station. That valve has since been replaced. (2) Ten State Standard 4.2.1 "Presedimentation basins should be equipped with continuous mechanical sludge removal apparatus." The Village of Cadiz Public Water System is currently exploring options to remedy this problem. (3) The State Standard 4.2.3 "Flocculation basins shall be quipped with a drain and/or pumps to handle dewatering and sludge removal."The Village of Cadiz Public Water System has remedied this problem using a redundant valve in the system. (4) Ten State Standard 4.3.1.10 Which has to do with all the filters not each having individual flow meters. The Village of Cadiz has contracted with Hull & Associates to engineer and design a way to monitor the flow from each of the filters individually. Ten State Standard 4.3.1.10 Filtration, Appurtenances- This is a violation stemming from the fact that there are no filter-to-waste mechanisms in the filter backwash system.. Again Hull & Associates are researching to find a way to add these mechanisms that the Village of Cadiz Public Water System can afford. OAC:3745-83-01 (H) (1) The Village of Cadiz Public Water System does not have a formal valve exercising program. The Village of Cadiz Public Water System will develop a written and formal valve exercising program in 2019. OAC:3745-85-01 (B) "Each community water system shall prepare and maintain a written contingency plan. When routine methods of delivery or treatment are compromised, the contingency plan shall provide for the protection of public health to extent possible, through actions including but not limited to the notification of users, including the direct notification of critical users, the provision of alternate sources of water and restoration of service." Necessary sections of the contingency plan rule were not addressed in the current plan. Revisions have been submitted to the OEPA for approval.

In 2018 the Village of Cadiz public Water System had an unconditioned license to operate our water system. Public participation and comment are encouraged at regular meetings of The Village of Cadiz Council which meets the first and third Thursday of each month.

**For more information on your drinking water contact Keith Grewell at 740-942-3884.**

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (ppm)	4	4	2.00	1.26	2.38	2018	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	29.7	7.60	37.7	2018	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	46.4	20.5	48.7	2018	No	By-product of drinking water disinfection
Total Organic Carbon (% Removal)	NA	TT	2.00	.97	4.00	2018	No	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 of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.								
<b>Inorganic Contaminants</b>								
Fluoride (ppm)	4	4	1.16	.81	1.27	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	.679	0.1	.679	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	TT	0.63	0.02	0.63	2018	No	Soil runoff
Turbidity (% meeting standard)	NA	TT	85%	85%	100%	2018	Yes	Soil runoff

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	< .05	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Lead - action level at consumer taps (ppb)	0	15	< .5	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

**Violations and Exceedances**  
 The Village of Cadiz Public Water System failed to maintain a turbidity under .3 NTU for 95% of the time in January 2018. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. The Village of Cadiz Public Water System has undergone filter media studies and has determined that the filter media needs to be replaced and a filter-to-waste valve must be retro-fitted to our existing pipe gallery.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

### Important Drinking Water Definitions

Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a 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.
MRDL	MRDL: Maximum residual disinfectant 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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