

# CADIZ WATER TREATMENT PLANT

## Drinking Water

### Consumer Confidence Report

For 2020

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 drawn 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 highly susceptible to contamination. By their nature, surface waters are readily accessible and can be easily contaminated by chemicals and pathogens. Also compared to ground water, they tend to move swiftly, so an upstream spill may rapidly arrive at the public drinking water intake with little warning or time to prepare. Therefore, the drinking water supplied to the Cadiz public water system has a high susceptibility to contamination.

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 David Barr 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).

“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 Cadiz Public Water System 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>.”

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 compounds and volatile organic chemicals during 2020. 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 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. (2) 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 CT Consultants to engineer and design a way to monitor the flow from each of the filters individually. (3) 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. CT Consultants are researching to find a way to add these mechanisms. These Notice of Violations were not corrected in 2019, they are scheduled to be corrected in 2021.

In 2020 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 David Barr at 740-942-3884.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Level Found	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	2.27	1.96	2.73	2020	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	30.9	9.22	23.2	2020	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	55.7	17.3	47.5	2020	No	By-product of drinking water disinfection
Total Organic Carbon (% Removal)	NA	TT	1.16	1.00	2.4	2020	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.

#### Inorganic Contaminants

Fluoride (ppm)	4	4	1.08	0.81	1.26	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.979	< 0.1	0.979	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

#### Microbiological Contaminants

Turbidity (NTU)	NA	TT	0.24	0.03	0.24	2020	No	Soil runoff
Turbidity (% meeting standard)	NA	TT	100%	100%	100%	2020	No	Soil runoff

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the Village of Cadiz Public Water System highest recorded turbidity result for 2020 was .24 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100 % .

#### Lead and Copper

Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants
Lead (ppb)	15 ppb	0	0	No	2020	The likely source is Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 21 samples exceeded the action level, the MCGL is 0 ppb, and the action level is 15 ppb. There was no violation.					
Copper (ppm)	1.3 ppm	0	0	No	2020	The likely source is Corrosion of household plumbing systems; erosion of natural depositsLeaching from wood preservatives
	0 out of 21 samples exceeded the action level, the MCGL is 1.3 ppm, and the action level is 1.3 ppm. There was no violation.					

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
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.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
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
<	The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that can be detected was 5 and the contaminant in that sample was not detected.

**For more information please contact:**

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