WATER DEPARTMENT
2023 DRINKING WATER
CONSUMER CONFIDENCE REPORT (CCR)

INTRODUCTION

The City of Cambridge Public Water System is pleased to provide you with the 2023 Consumer Confidence Report (CCR). Within this report there is information for you, the consumer, on the quality of your drinking water. Included is the source of your water, special precaution needs, water system violations, sources of water contaminant, contaminants test results and their associated maximum contaminant level (MCL) that the EPA considers safe, how to participate in decisions concerning your drinking water and water system contacts. The goal for the Cambridge Water Department is to ensure any contaminants found in your drinking water are below the level at which there is no known health risk.

SOURCE WATER INFORMATION

The City of Cambridge Public Water System operates a community public water system that serves a direct population of approximately 10,360 people. The city also sells water to Western Guernsey Regional Water District and the Guernsey County Water Department, for a combined service population of 29,836. In addition, the city maintains an emergency connection with the village of Byesville. This emergency connection was not utilized during the 2023 calendar year.

For the purposes of source water assessments, all surface waters are susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by pathogens and chemicals, with relatively short travel times from source to the intake. Based on the source water assessment performed by the State EPA in 2005, the source water for the Cambridge Public Water System is susceptible to contamination from possible leaking underground storage facilities, oil and gas wells, mining runoff, contamination from scattered pockets of small unsewered areas, potential for contamination/spills from local industries to Wills Creek and its tributaries, and potential spills (hazardous and otherwise) from interstate traffic.

It is important to note that this assessment was based on available data, and therefore may not reflect current conditions in all cases. Water quality, land use and other activities that are potential sources of contamination may change with time. While the source water for the Cambridge Public Water system is considered susceptible to contamination, historically, the Cambridge Public Water System has effectively treated this source water to meet or exceed the drinking water quality standards set forth. For more

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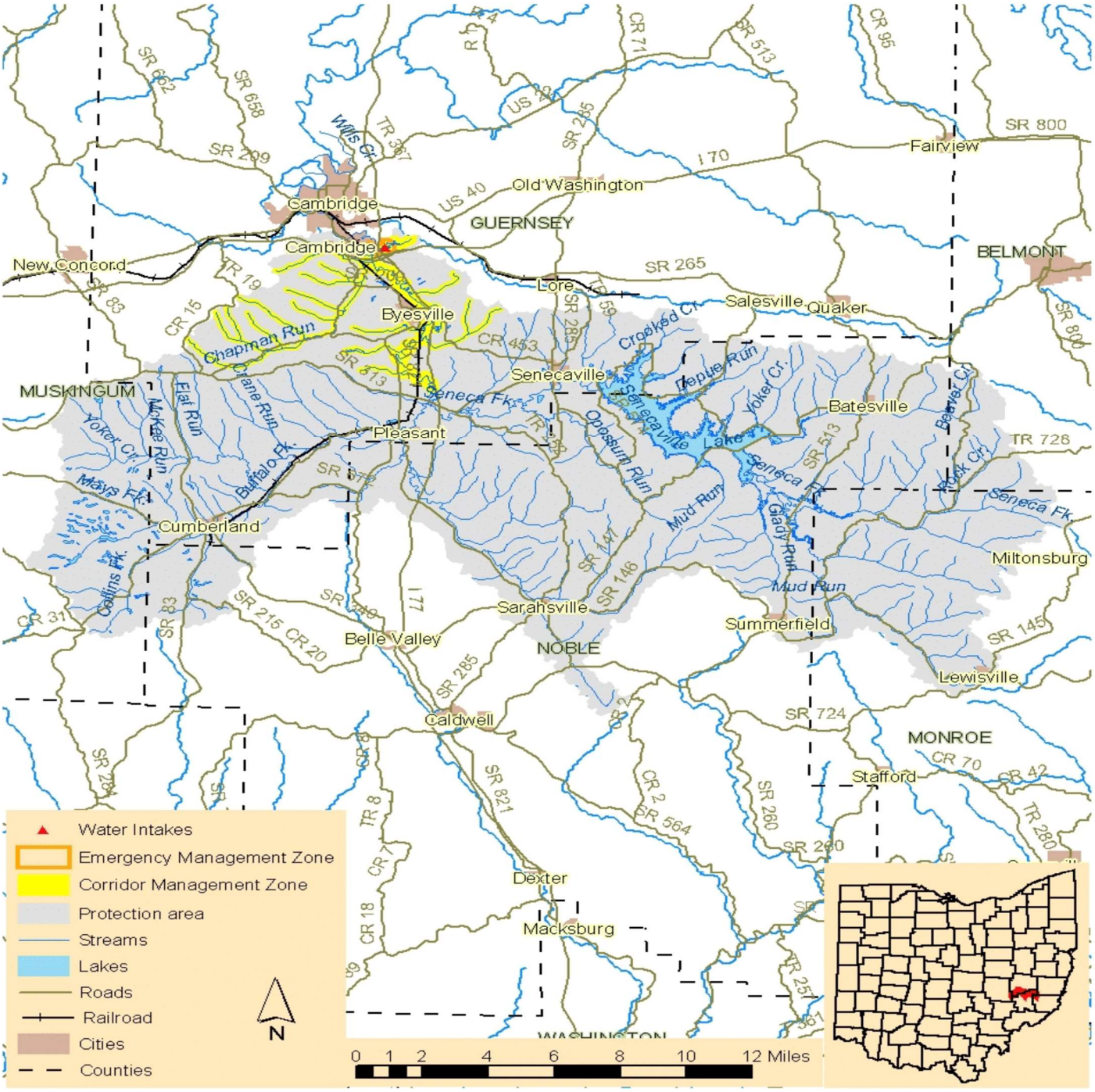
information regarding this assessment, please contact the Water Superintendent, Tom McVicker, at 740-439-2130.

Drinking Water Source Protection Area for the City of Cambridge



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SOURCES OF CONTAMINATION

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, can be naturally occurring or result from urban stormwater 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 stormwater 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 number 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).

SPECIAL PRECAUTION NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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).

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ABOUT YOUR DRINKING WATER

The EPA requires regular sampling to ensure drinking water safety. The City of Cambridge Public Water System conducted sampling for Inorganics; Nitrate; Synthetic Organics; Volatile Organics; Total Organic; Total Microcystins; Cyanobacteria; Total Coliform; Total Chlorine and Disinfection Byproducts during 2023. There were 597 samples collected for a total of 56 different contaminants, most of which were not detected in the Cambridge Water Department System. 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, is more than one year old.

MONITORING & REPORTING VIOLATIONS & ENFORCEMENT ACTIONS

The City of Cambridge Public Water System is pleased to announce there were no Monitoring and Reporting violations for the 2023 calendar year.

TABLE OF DETECTED CONTAMINENTS

Listed below is information on those contaminants that were found in the City of Cambridge Public Water System.

INORGANIC CONTAMINANTS (LEAD & COPPER 6/1/23 - 9/3/23 @ CUSTOMER TAPS)							
CONTAMINANT	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINATION
Lead (ppb)	AL = 15	0	0	0 - 3.33	NO	2023	Corrosion of household plumbing: erosion of natural deposits.
	0 out of 60 samples were found to have lead in excess of the Action Level of 15 ppb.						
Copper (ppm)	AL = 1.3	0.0	0.0235	0.00334 - 0.03670	NO	2023	Corrosion of household plumbing: erosion of natural deposits: leaching from wood preservatives.
	0 out of 60 samples were found to have copper levels in excess of the Action Level of 1.3 ppm.						
Fluoride (ppm)	4	4	0.98	0.80 - 1.16	NO	2023	Erosion of natural deposits, water additive which promotes strong teeth.
Nitrate (ppm)	10	10	0.14	0 - 0.14	NO	2023	Runoff from fertilizer use: erosion of natural deposits.es strong teeth.
BARIUM (ppm)	2	2	0.035	N/A - 0.035	NO	2023	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

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DISINFECTION BYPRODUCTS							
ANALYTE	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINATION
TOTAL TRIHALOMETHANES TTHMs (ppb)	N/A	80	61.3	25.9 - 83.6	NO	2023	By-products of drinking water chlorination.
HALOACETIC ACIDS HAA5 (ppb)	N/A	60	40.1	16.5 - 53.3	NO	20223	By-products of drinking water chlorination.

RESIDUAL DISINFECTANTS							
ANALYTE	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINATION
Total Chlorine (ppm)	MRDLG 4	MRDL 4	1.38	1.09 - 1.47	NO	2023	Water additive used to control microbes.

MICROBIOLOGICAL CONTANIMENTS							
ANALYTE	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINATION
Turbidity (NTU)	TT=95% of SAMPLES ≤ 0.30	NA	0.14	0.04 - 0.14	NO	2023	Soil Runoff
Turbidity (% samples meeting standard)	TT	NA	100.00%		NO	2023	Soil Runoff
Total Organic Carbon	TT	NA	1.2	1.02 - 2.75	NO	2023	Naturally present in the environment.

RADIOLOGICAL CONTAMINENTS							
ANALYTE	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINATION
GROSS ALPHA (pCi/L)	15	0	0.665	0 - 0.665	NO	2020	Erosion of natural deposits
RADIUM (226/228) (pCi/L)	5	0	0.568	0 - 0.568	NO	2020	Erosion of natural deposits

In 2021, our PWS was sampled as part of the State of Ohio's Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Results from this sampling indicated PFAS was detected in our drinking water below the action level established by Ohio EPA. Follow-up monitoring is being conducted. For more information about PFAS, and to view our latest results please visit **pfas.ohio.gov.**

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TURBIDITY

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 0.30 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the City of Cambridge Public Water Supply's highest recorded turbidity result for 2023 was 0.14 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

TOTAL ORGANIC CARBON (TOC)

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system was in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

TREATMENT TECHNIQUE (TT) VIOLATIONS

The City of Cambridge Public Water System is pleased to announce there were no Treatment Technique violations for the 2023 calendar year.

LEAD EDUCATIONAL INFORMATION

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 City of Cambridge 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, & 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.

TOTAL COLIFORM

The City of Cambridge Public Water Supply is please to share we had zero positive total coliform results on the 120 samples taken for 2023.

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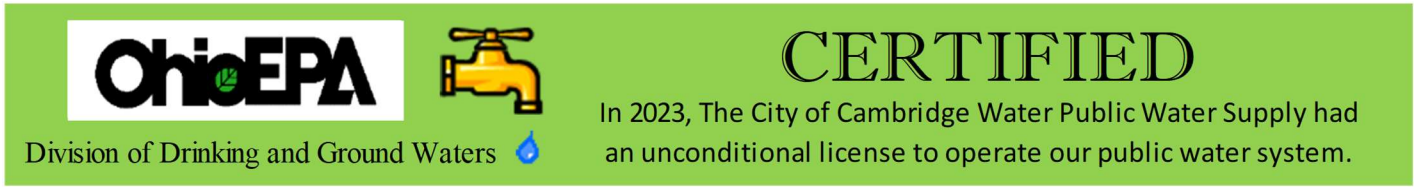
LICENSE TO OPERATE



HOW DO I PARTICIPATE IN DECISIONS CONCERNING MY DRINKING WATER?

We want our valued customers to be informed about their water utility. If you want to learn more, please attend our regularly scheduled meetings of Cambridge City Council. These meetings are held the second and fourth Mondays of each month at 7:00 p.m. at City Hall.

We are pleased to report that our drinking water is safe and meets federal and state requirements. For more information on your drinking water please contact Brian Starr, Chief Operator IV or Shawn Kirkbride, Asst. Chief Operator III at (740) 439-2130 or Lou Thornton at (740) 432-3601.

Utility Office:		Engineer Office:		Water Treatment Plant:	
Phone:	740-432-5453	Phone:	740-432-3601	Phone:	740-439-2130
Fax:	740-439-7365	Fax:	740-439-9867	Fax:	740-432-8700
Hours:	8 am to 4:30 pm M-F	Hours:	7:30:00 AM to 4 pm M-F	Hours:	24/7

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FREQUENTLY ASKED QUESTIONS

QUESTION: **Why is the fire hydrant running?**

ANSWER: Flushing hydrants can be done to not only test the fire flow capacity in the event of a fire, but also to remove sediment and rust from the water, to release air in the lines after maintenance, or to maintain proper chlorine concentrations in your area. ... Hydrants are flushed to keep water moving and keep pipes from stagnating in this case.

QUESTION: **I reported a break an hour ago and there is no one digging yet, why not?**

ANSWER: We have to have responses from member utilities for the Ohio Utilities Protection Service (OUPS) underground utilies locators before we dig. Sometimes this can tan an hour or two. Locators commonly commute from Columbus, Chillicothe or Lancaster. Once the gas, electric and communications lines have been located we can safely begin diggin.

QUESTION: **What is the hardness of the water in grains per gallon?**

ANSWER: The City of Cambridge Public Water Supply's average water hardness in 2023 was 305 mg/L which equals 17.82 grains per gallon. (1 gpg = 17.12 mg/L)

QUESTION: **I need to purchase bulk water to fill a pool or I know someone who has a well and needs to haul water to supplement the well. Can I purchase bulk water from the Cambridge Water Department?**

ANSWER: Yes. The Cambridge Water Department has a self serve bulk water vending station located on Oxford Avenue. For information on obtaining a vending card, please contact the Utilities Office at 740-432-5453.

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BOIL ORDER INFORMATION

The Ohio EPA recommends public water suppliers to issue a boil order any time the pressure in the water distribution system falls below 20 psi (pounds of pressure per square inch). Water main breaks, hydrant flushing, structure fires, and normal operational maintenance in the distribution system can cause low-pressure or no pressure events. Boil orders are issued for these areas of the water distribution system where these events have taken place.

QUESTION: **What is a Boil Order?**

ANSWER: A boil order is a precautionary measure taken when the distribution system pressure drops below 20 psi in the water distribution system. This test allows a 24 hour laboratory test to confirm the water quality is safe and was not affected by the depressurization event.

QUESTION: **Who issues a Boil Order?**

ANSWER: The Water Distribution Maintenance Department issues boil orders through the water treatment plant.

QUESTION: **What do I do when a Boil Order is issied?**

ANSWER: All water used for human consumption should be boiled at a rolling boil for 2-3 mins and then cooled prior to consumption. You should also discard icemaker ice.

QUESTION: **How do I know when a Boil Order has been issued?**

ANSWER: When boil orders are issued they are advertised on the local radio stations and in the local newspaper. Additionally, you can call the water treatment plant at 740-439-2130 or the utilities office at 740-432-5453 to see if a boil order has been issued for your neighborhood.

QUESTION: **How long will I be under a boil order?**

ANSWER: Most Boil Orders last 24-48 hrs as it takes 24hrs to receive results from the Lab once a sample has been collected and sent for testing.

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DEFINITION TABLE

Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Contact Time (CT)	means the mathematical product of a "residual disinfectant concentration: (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).
Cyanobacteria	Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
Cyanotoxin	Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as "algal toxin".
Maximum Contaminant Level (MCL)	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
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 Residual Disinfectant Level (MRDL)	The highest residual disinfectant level allowed
Maximum Residual Disinfectant Level Goal (MRDLG	The level of residual disinfectant below which there is no known or expected risk to health.
Microcystins	Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
NA	Not applicable
NTU	Nephelometric Turbidity Unit (a measure of particles held in suspension in water.)
Parts per Million (ppm) or Milligrams per Liter (mg/l)	units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
Parts per Billion (ppb) or Micrograms per Liter (ug/l)	are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
PFAS	Per- and polyfluoroalkyl substances (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.
Picocuries per Liter (pCi/L)	A pCi is a measure of the rate of radioactive decay of radon. One pCi is one trillionth of a Curie, 0.037 disintegrations per second, or 2.22 disintegrations per minute.
The symbol "<"	A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected
Total Coliform	Total coliforms are a group of related bacteria that are (with few exceptions) not harmful to humans. A variety of bacteria, parasites, and viruses, known as pathogens, can potentially cause health problems if humans ingest them.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.

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