

Village of Continental, Ohio

System ID Number: OH6900212

P.O. Box 429

Continental, Ohio 45831

DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2022

Ohio Environmental Protection Agency
Division of Drinking and Ground Waters

<https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters>

June 2023

Village of Continental, Ohio
Drinking Water Consumer Confidence Report
For 2022

Introduction

The **Village of Continental, Ohio** has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report are general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Source of Drinking Water

The Village of Continental, Ohio is a community public water system serving 1200 people. receives its drinking water from two 600' wells that are located just west of town and are considered underground.

The Ohio EPA performed an assessment of our source water in 2005 and has determined that the Village of Continental susceptibility to contamination is **low** due to the depth to water in the bedrock aquifer averages 45 feet below ground surface, a confining layer of glacial till approximately 45 feet thick is present between the ground surface and the aquifer and offers significant protection from contaminant movement from the ground surface to the aquifer, and the lack of detections of regulated contaminants. For more information about our Drinking Water Source Assessment, contact **Mike Leis at 419-643-4231**

What are sources of contamination to drinking water?

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 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 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 Federal 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).

About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Village of Continental, Ohio conducted sampling for bacteria; inorganic; radiological; synthetic organic; volatile organic during 2022. Samples were collected for a total of 8 different contaminants most of which were not detected in the Village of Continental, OH 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, is more than one year old.

Monitoring & Reporting Violations

During the month of December 2022, the Village of Continental failed to report results of sampling of Disinfection By-Products. In February 2023, the village received a Notice of Violation of Ohio Administrative Code Rule (OAC) 3745-81-24 for failing to monitor the drinking water during the Fourth Quarter of 2022 monitoring period and/or report results for the following contaminants: Disinfection By-Products. The village will notify the customers with public notice, submit a copy of the public notice to the Ohio EPA, promptly collect the next sample according to the most recent monitoring schedule, submit the sample for analysis to a certified laboratory. The village returned to compliance when the sample results were received and submitted to the Ohio EPA in January 2023

Table of Detected Contaminants

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

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Total Chlorine (ppm)	4	4.0	2.0125	1.66-2.80	N	2021	Water additive used to control microbes
	4	4.0	1.983	.29-2.69	N	2022	
Disinfection Byproducts							
Haloacetic Acids (five) (HAA5) (ppb)	N/A	60	6	14.1-20	N	2021	By-product of drinking water disinfection
	N/A	60	22.75	14.1-20	N	2022	
TTHM (Total trihalomethanes) (ppb)	N/A	74.3	17.3	57-112	N	2021	By-product of drinking water disinfection
	N/A	74.3	57.75	57-112	N	2022	

Inorganic Contaminants							
Fluoride(ppm)	4	4	2.58	N/A	N	2019	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer factories and plastic
Cyanide	200	200	14	N/A	N	2019	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Radioactive Contaminants							
Beta/photon emitters (mrem/yr.)	0	4	8.26	N/A	N	2019	Decay of natural and man-made deposits
Lead and Copper							
Contaminant (units)	Action Level (AL)	MCLG	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants
Lead (ppb)	15 ppb	0 ppb	0	0	N	2022	
	0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	1.3 ppm	0	.036	N	2022	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
	0 out of 10_ samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

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 Continental 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>.

Unregulated Contaminants- Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2022, The Village of Continental participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). The following table contains information on contaminants that were detected during UCMR4 sampling. For a copy of results please call **Mike Leis at 419-643-4231**

Table of Unregulated Contaminants

Contaminates (units)	Year	Average Level Found	Range of Detection
Manganese (µg/L)	2021	1.33	0.45-0.88
Manganese (µg/L)	2022	.5	0.45-0.88

Revised Total Coliform Rule Information

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose of protecting public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

Violations

During the month of January 2022, the village received a Notice of Violation for partial resolution of corrective actions for the Notice of Violation issued in April of 2021. The Notice of Violation of April 2021 was issued to the Village of Continental for exceeding the manganese secondary maximum contaminant level and exceedance of the Lifetime Health Advisory Level for Manganese resulting in an issuance of a Significant Deficiency by the Ohio EPA. The exceedances occurred on the following dates: February 23rd, March 26th, May 18th, August 31st, November 23rd, November 30th, and December 7th, 2021. The following steps were taken to prevent the violation from happening again: Replace the permanganate feed line, evaluation of the filter backwash rate, evaluate the potassium permanganate dosage, to replace the filter media, and continue to monitor and report any samples greater than or equal to .01 mg/L. Corrective Actions still outstanding in January 2022 :1. Evaluation of the Potassium Permanganate Dosage-The report provided on December 2021 for the permanganate dosage did not give calculations performed or assumptions made to determine the oxidant demand or dosage were provided. Also, no information about the feed pump settings was provided. The village will provide the missing information to the EPA by January 31, 2022. 2. Replacement of the Filter Media. The village did not meet the December 16, 2021, deadline to complete the replacement of the filter media. The village with complete the filter media replacement by February 18, 2022. The Village returned to compliance on the following dates: January 2022, the permanganate feed line was replaced, in August 2022, the Village provided the manganese dosage report that stated the feed system is operating in accordance with the manganese dosage report, and in April 2022, all three filters completed their media replacement and were returned for service.

During the month of February 2022, The Village of Continental was in violation of OAC Rule 3745-87-03(B)(2) for failure to maintain an inventory and evaluation of all assets. This notice of violation will be completed and resolved by completion of the asset inventory by March 31, 2022, and an evaluation of assets by June 30, 2022. The Village returned to compliance in February 2023 when the inventory and evaluation of all assets was completed.

During the month of March 2022, The Village of Continental received a Notice of Violation of OAC Rule 3745-95-06 (c) (3). This is an Outstanding Notice of Violation from the June 3, 2021, Notice of Violation. The village did not provide records that all containment principal backflow preventers had been tested within the past 12 months. By March 31, 2022, the village will send the EPA a copy of the inspection and testing report for the backflow device at Wollam Ag, documenting the device has been tested in the past 12 months. The Village returned to compliance in March 2022, when a copy of the backflow device testing report for Wollam Ag. Was submitted.

During the month of March 2022, The Village of Continental was in violation of OAC Rule 3745-87-03(B)(2) for failure to maintain an inventory and evaluation of all assets.

This notice of violation will be completed and resolved by completion of the asset inventory by June 30, 2022, and an evaluation of assets by June 30, 2022, The Village returned to compliance in February 2023 when the inventory and evaluation of all assets was completed.

During the month of April 2022, the village received a Notice of Violation for partial resolution of corrective actions for the Notice of Violation issued in April of 2021. The Notice of Violation of April 2021 was issued to the Village of Continental for exceeding the manganese secondary maximum contaminant level and exceedance of the Lifetime Health Advisory Level for Manganese resulting in an issuance of a Significant Deficiency by the Ohio EPA. The exceedances occurred on the following dates: February 23rd, March 26th, May 18th, August 31st, November 23rd, November 30th, and December 7th, 2021. The following steps were taken to prevent the violation from happening again: Replace the permanganate feed line, evaluation of the filter backwash rate, evaluate the potassium permanganate dosage, to replace the filter media, and continue to monitor and report any samples greater than or equal to .01 mg/L. Corrective Actions still outstanding in January 2022 :1. Evaluation of the Potassium Permanganate Dosage-The report provided on December 2021 for the permanganate dosage did not give calculations performed or assumptions made to determine the oxidant demand or dosage were provided. Also, no information about the feed pump settings was provided. The village will submit the permanganate dosage report to the Ohio EPA by June 30, 2022, and notify Ohio EPA that permanganate is being fed as indicated in the permanganate dosage report.by July 10, 2022 . 2. Replacement of the Filter Media. The village did not meet the February 18, 2022, deadline to complete the replacement of the filter media. The village will complete the filter media replacement by April 30, 2022. The Village returned to compliance on the following dates: January 2022, the permanganate feed line was replaced, in August 2022, the Village provided the manganese dosage report that stated the feed system is operating in accordance with the manganese dosage report, and in April 2022, all three filters completed their media replacement and were returned for service.

During the month of April 2022, The Village of Continental received a Notice of Violation of OAC Rule 3745-82-02 for exceedance of the secondary maximum contaminant level for manganese of .05mg/L on March 1, 2022. The village will complete the filter maintenance and continue to report all manganese results to the EPA as soon as results are available. The Village returned to compliance in April 2022 when all three of filters completed their media replacement and were returned for service.

During the month of August 2022, the village received a Notice of Violation for partial resolution of corrective actions for the Notice of Violation issued in April of 2021. The Notice of Violation of April 2021 was issued to the Village of Continental for exceeding the manganese secondary maximum contaminant level and exceedance of the Lifetime Health Advisory Level for Manganese resulting in an issuance of a Significant Deficiency by the Ohio EPA. The exceedances occurred on the following dates: February 23rd, March 26th, May 18th, August 31st, November 23rd, November 30th, and December 7th, 2021. The following steps were taken to prevent the violation from happening again: Replace the permanganate feed line, evaluation of the filter backwash rate, evaluate the potassium permanganate dosage, to replace the filter media, and continue to monitor and report any samples greater than or equal to .01 mg/L. Corrective Actions still outstanding in January 2022 :1. Evaluation of the Potassium Permanganate Dosage-The report provided on December 2021 for the permanganate dosage did not give calculations performed or assumptions made to determine the oxidant demand or dosage were provided. Also, no information about the feed pump settings was provided. The village will submit the permanganate dosage report to the Ohio EPA by August 22, 2022, and notify Ohio EPA that permanganate is being fed as indicated in the permanganate dosage report.by September 1, 2022. 3. The village will continue to immediately report the results of all entry point manganese samples that are greater than or equal to 0.1 mg/L. The Village returned to compliance on the following dates: January 2022, the permanganate feed line was replaced, in August 2022, the Village provided the manganese dosage report that stated the feed system is operating in accordance with the manganese dosage report, and in April 2022, all three filters completed their media replacement and were returned for service

During the month of August 2022, The Village of Continental was in violation of OAC Rule 3745-87-03(B)((2) for failure to provide an evaluation of all assets. This notice of violation will be completed and resolved by completion of an evaluation of assets by October 7, 2022. The Village returned to compliance in February 2023 when the inventory and evaluation of all assets was completed.

During the month of January 2023, The Village of Continental was in violation of OAC Rule 3745-87-03(B)((2) for failure to provide an evaluation of all assets. This notice of violation will be completed and resolved by completion of an evaluation of assets by February 28, 2023. The Village returned to compliance in February 2023 when the inventory and evaluation of all assets was completed.

Definitions of terms used within this report.

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 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 (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.

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.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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).

Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

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.”

Level 1 Assessment is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

Master Meter (MM): A master meter is one that connects a wholesale public water system to consecutive public water system(s). This type of meter monitors the amount of water being sent to the consecutive system(s) and can also be used to determine the quality of water being delivered to the consecutive system(s).

Parts per Million (ppm) or Milligrams per Liter (mg/L) are 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 (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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.

Picocuries per liter (pCi/L): A common measure of radioactivity.

How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the City Council, which meets monthly.

For more information on your drinking water, contact Mike Leis, Operator at 419-643-4231.

License to Operate

We have a conditioned license to operate our public water system. The conditions require us to address ongoing violations. For more information on these conditions or violations, contact Mike Leis at 419-596-3822
PWS#OH6900212

Village of Continental -Please call our office if you have any questions 419-596-3822

We at the Village of Continental work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Please look at the EPA website for ways to improve our drinking water and find projects that our children can use to learn to protect this valuable resource.