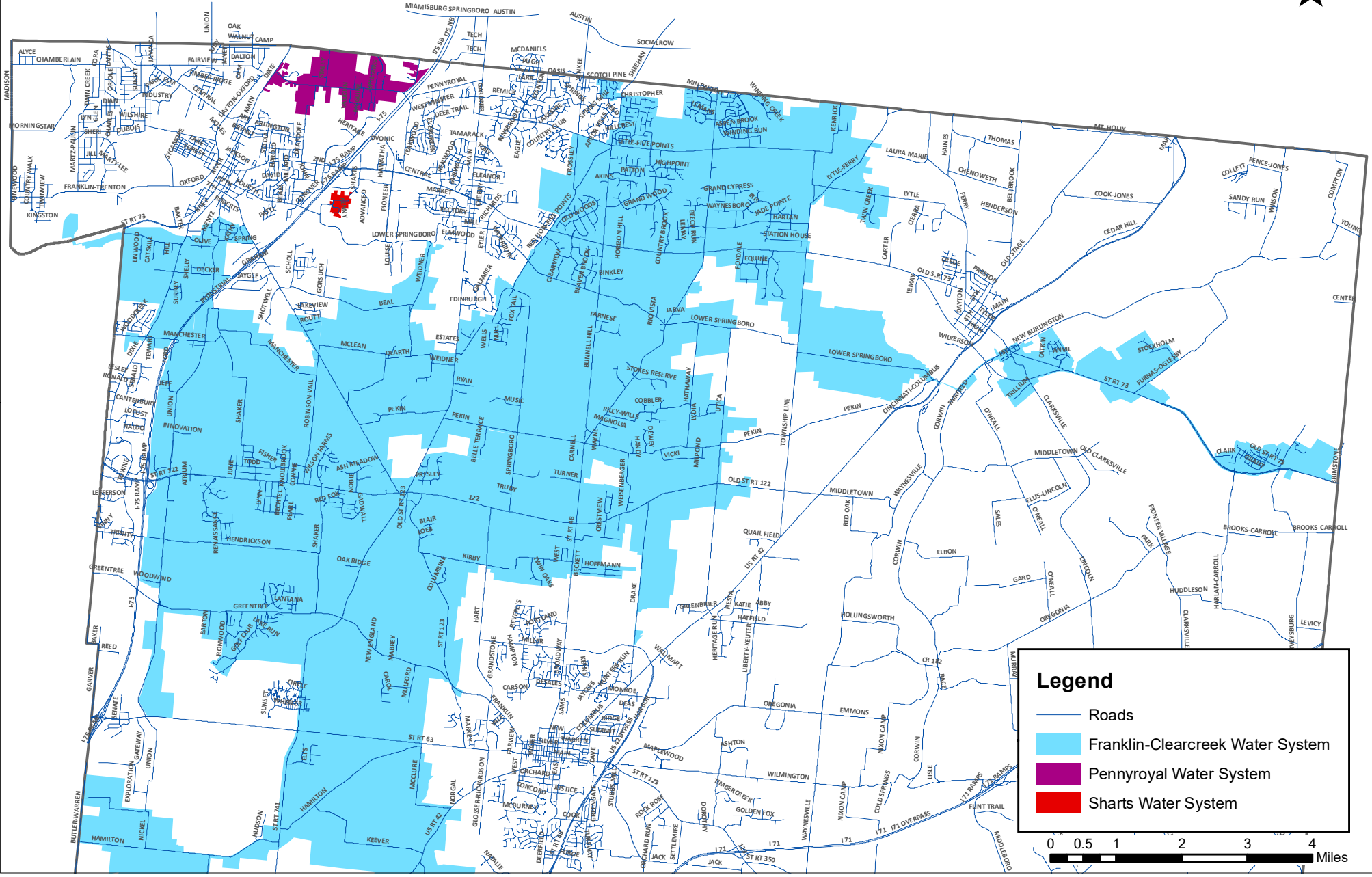
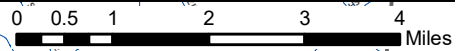


SERVICE AREA BOUNDARY MAP - NORTHERN WARREN COUNTY



Legend

- Roads
- Franklin-Clearcreek Water System
- Pennyroyal Water System
- Sharts Water System



Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for the Socialville Water System

PWSID# 8304203

The Warren County Water Department has prepared the following information for the Socialville Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome

Water Source

Water for the Socialville Water System is purchased by Warren County from Greater Cincinnati Water Works. Water is withdrawn from both the Ohio River and the Great Miami Aquifer. Water from the Ohio River is treated at the Miller Treatment Plant which is located on the east side of Hamilton County. Water is also pulled from the Great Miami Aquifer. 13 wells located in the southern part of Butler County produce water that is treated at the Bolton Treatment Plant. Socialville also has an emergency backup system. The connection is located on Socialville-Foster road and is with the Warren County Richard Renneker Water System.

As with all surface waters, The Ohio EPA has classified the Ohio River as highly susceptible to potential contamination. The Ohio EPA has also classified their portion of the Great Miami Buried Valley Aquifer as highly susceptible to contamination. . Should you need to find your Source Water Assessment Information; the report can be accessed at Ohio EPA's at the following link, <http://www.wpp.epa.ohio.gov/gis/swpa/OH8304203>.

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 results 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Socialville Water System conducted sampling for (Bacteria, and Disinfection by-Products) during 2020, collected by the Warren County Water Department. Other analytes were collected and tested by Cincinnati Water Works. 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.

License

The Socialville Water System currently operates with an unconditioned license (Green) to operate. The license is valid from January 1, 2021 to January 30, 2022.

Whom to Contact

For further information about water quality, contact the Warren County Water and Sewer Department. Hours of operation are 7:30 AM and 4:30 PM, Monday through Friday:

Main Office (513)695-1377
Superintendent of Operations (513) 683-3687 **FAX (513) 697-1752**
WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

An Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the Cincinnati Water Works and the Warren County Water Laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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.

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

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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

Compliance Monitoring and Disinfection Requirements. Warren County Water Department 2020

Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sample Year	Sources of Substances
Chlorine (mg/L)	1.3	0.2 - 2.0	No	MRDL= 4	MRDLG= 4	2020	Element used for disinfection

Total Coliform samples were collected and analyzed in 2020. 180 samples collected and all samples were total coliform negative and E. coli negative.

The following table lists the drinking water contaminants detected between January 1 and December 31, 2020. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. These Substances were tested by *Greater Cincinnati Water Works*

Regulated Contaminants: Contaminants subject to an MCL, Action Level, or (TT) Treatment Technique

Substance	Miller Plant (Ohio River)		Bolton Plant (Great Miami River)		MCL	MCLG	Violation	Sample Year	
	Highest Level Detected	Range of Detection	Highest Level Detected	Range of Detection					
Fluoride	0.88 ppm	0.68-1.04 ppm	0.89 ppm	0.73-1.01 ppm	4	4	No	2020	Erosion of natural deposits; Promote strong teeth.
Nitrate	1.00 ppm	.50-1.00 ppm	1.60 ppm	n/a	10	10	No	2020	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits.

Total Organic Carbon	2.23	1.92-3.25	nr	nr	TT ¹	n.a.	No	2020	Naturally present in the environment.
Turbidity (NTU)	0.09 100% < 0.3 NTU	0.01-0.09	nr	nr	TT ¹ < 1 NTU max and TT2 < 0.3 NTU 95% of the time	n.a. n.a.	.No	2020	Soil runoff.
Barium	0.028 ppm	n.a.	0.013 ppm	na	2	2	No	2020	Erosion of natural deposits; Discharge of drilling waste and metal refineries.
Trihalomethanes	55.0 ppb	11.4-68.5 ppb	55.0 ppb	11.4-68.5 ppb	80	0	No	2019	Byproduct of drinking water chlorination
Haloacetic Acids	12.2 ppb	5.09-16.1 ppb	12.2 ppb	5.09-16.1 ppb	60	0	No	2019	Byproduct of drinking water chlorination
Lead (Jan-June) 1 st Set	90 th percentile 5.00 ppb	nd-30.5 ppb	90 th percentile 5.00 ppb	nd-30.5ppb	15	0	No	2020	Corrosion of household plumbing; natural deposits
Copper (Jan-June) 1 st Set	90 th percentile 0.022 ppm	nd-0.066 ppm	90 th percentile 0.022 ppm	nd-0.066 ppm	1.3	0	No	2020	Corrosion of household plumbing systems; erosion of natural deposits; leaching from
Lead (July-Dec) 2 nd Set	90 th percentile 6.00 ppb	nd-41.4 ppb	90 th percentile 6.00 ppb	nd-41.4 ppb	15	0	No	2020	Corrosion of household plumbing; natural deposits
Copper (July-Dec) 2 nd Set	90 th percentile 0.021 ppm	nd-0.043 ppm	90 th percentile 0.021 ppm	nd-0.043 ppm	1.3	0	No	2020	Corrosion of household plumbing systems; natural deposits

***From Cincinnati Water Works, 1st set, “1 out of 134 samples tested during the most recent compliance period were > the Action Level for Lead”. For both Miller Plant and Bolton Plant public water**

*** From Cincinnati Water Works, 1st set “0 out of 134 samples tested during the most recent compliance period were > the Action Level for Copper”. For both Miller Plant and Bolton Plant public water**

****From Cincinnati Water Works, 2nd set, “5 out of 110 samples tested during the most recent compliance period were > the Action Level for Lead”. For both Miller Plant and Bolton Plant public water**

**** From Cincinnati Water Works, 2nd set “0 out of 110 samples tested during the most recent compliance period were > the Action Level for Copper”. For both Miller Plant and Bolton Plant public water**

¹ The value reported under “highest compliance level detected” for TOC is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value of <1 indicates that the water system is in compliance with TOC removal requirements. A value of >1 indicates a violation of the TOC removal requirements.

Note1. The Ohio EPA requires monitoring certain contaminants once per year. The value is the maximum detected concentration.

TT = A required process intended to reduce the level of a contaminant in drinking water

Results of GCWW Voluntary Monitoring for Cryptosporidium: GCWW has tested for Crypto in treated waters and never detected it. GCWW also tested for Crypto in the Ohio River surface water and it was found in 0 of 22 samples during 2015.

Sodium: Tested as water leaves treatment plants Miller Plant: 30mg/l
Bolton Plant: 30 mg/l. Approximately 4 cups in a liter

Average Water Hardness: Miller Plant - 8 grains per gallon (137 mg/L)
Bolton Plant - 10 grains per gallon (171 mg/l)

Unregulated Contaminants for which the EPA requires monitoring 2020 collected by the *Greater Cincinnati Water Works*

Substance	Miller Plant		Bolton Plant		Violation	MCLG	Sample Year	Sources
	Average Level Detected	Range of Detection	Average Level Detected	Range of Detection				
Chloroform	8.37 ppb	nd – 28.86 ppb	8.37 ppb	nd-28.86 ppb	n.a.	70	2020	Byproduct of drinking water disinfection
Bromodichloromethane	7.27 ppb	1.95-13.45 ppb	7.27 ppb	1.95-13.45 ppb	n.a.	0	2020	Byproduct of drinking water disinfection
Dibromochloromethane	9.60 ppb	3.06-19.81 ppb	9.60 ppb	3.06-19.81 ppb	n.a.	60	2020	Byproduct of drinking water disinfection.
Bromoform	6.22 ppb	nd-16.08 ppb	6.22 ppb	nd-16.08 ppb	n.a.	0	2020	Byproduct of drinking water disinfection.
Monochloroacetic Acid	nd ppb	nd-nd ppb	nd ppb	nd-nd ppb	n.a.	70	2020	Byproduct of drinking water disinfection.
Monobromoacetic Acid	nd ppb	nd-1.88ppb	nd ppb	nd-1.88	n.a.	n.a.	2020	Byproduct of drinking water disinfection.
Dibchloroacetic Acid	3.32 ppb	nd-10.0	3.32 ppb	nd-10.0	n.a.	0	2020	Byproduct of drinking water disinfection.
Trichloroacetic Acid	nd ppb	nd-3.72	nd ppb	nd-3.72 ppb	n.a.	20	2020	Byproduct of drinking water disinfection.
Dibromoacetic Acid	3.02 ppb	1.45-6.08 ppb	3.02 ppb	1.45-6.08 ppb	n.a.	n.a.	2020	Byproduct of drinking water disinfection
Sulfate	58 ppm	43-76 ppm	42 ppm	43-76 ppm	n.a.	n.a.	2020	Erosion of natural deposits

Action Levels (AL) control copper and lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels from the 30 samples collected from the Socialville System residences in 2018.

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Sample year	Violation	Sources	Number of Samples Greater Than Action Level
Copper	90 th percentile 0.0528 ppm	.00514- .157 ppm	AL= 1.3 ppm	0	2018	No	Corrosion of household plumbing; natural deposits	0
Lead	90 th percentile 3.04 ppb	<.5- 3.93 ppb	AL = 15 ppb	0	2018	No	Corrosion of household plumbing; natural deposits	0

“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. Socialville 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”

Unregulated Contaminants for which the EPA required monitoring under the Information Collection Rule to determine where certain substances occur and whether or not the substances should be regulated. Stage II Disinfection by-products monitored by Warren County Water Department. **2020**

Substance	Highest Level Detected	Range of Detection	Violation	MCL	MCLG	Sample Year	Sources of Substances
Total Trihalomethanes	52.9 ug/l	22.8 – 52.9 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Bromodichloromethane	11.7 ug/l	3.2 – 11.7 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Bromoform	17.4 ug/l	0.56-17.4 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Chloroform	20.4 ug/l	0.8 – 20.4 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Dibromochloromethane	21.2 ug/l	5.4 – 21.2 ug/l	No	80	0	2020	By-products of drinking water chlorination.
HAA5 Haloacetic acids	9.3 ug/l	3.9- 9.3 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Bromochloroacetic acid	3.1 ug/l	1.6 – 3.1 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Dibromoacetic acid	6.5 ug/l	1.4 – 6.5 ug/l	No	60	0	2020	By-products of drinking water chlorination
Dichloroacetic acid	5.1 ug/l	<1.0 – 5.1 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Monobromoacetic acid	1.4 ug/l	<1.0-1.4 ug/l	No	60	0	2019	By-products of drinking water chlorination.
Monochloroacetic acid	<2.0 ug/l	<2.0 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Trichloroacetic acid	2.6 ug/l	<1.0 – 2.6 ug/l	No	60	0	2020	By-products of drinking water chlorination

Additional Information

To ensure that tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The sources of drinking water (including 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: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife, (2) inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming, (3) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses, (4) 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 stormwater runoff, and septic systems, (5) radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities, (6)

Cryptosporidium is a microscopic organism that, when ingested, can result in diarrhea, fever, and other intestinal symptoms. Most healthy people can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised persons to consult their doctor about precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it can be spread through means other than drinking water.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for Sharts Road System

PWSID# 8346912

The Warren County Water Department has prepared the following information for the Sharts Road Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome.

Water Source

Warren County purchases its water for the Sharts Road area from the City of Springboro (Veolia Water). The City of Springboro obtains its public drinking water supply from the buried sand and gravel aquifers associated with the Great Miami River. The City of Springboro has five (5) wells to draw water from the aquifer. The wells are located on the west side of the Great Miami River at 8858 Dayton-Oxford Road. The Water Treatment Plant and well field is south of Chautauqua and borders the Village of Carlisle. Well water is pumped directly to the water treatment plant, where the water is filtered and treated with chlorine and fluoride.

The Ohio EPA assessment of the water source that supplies the City of Springboro has a high susceptibility to contamination. Should you need to find your source water assessment information, the report can be accessed at the Ohio EPA's website at the following link, <http://www.wapp.epa.ohio.gov/gis/swpa/OH8301803>

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 results 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Sharts Road Water System conducted sampling for (Bacteria, chlorine, Disinfection by-Products, Fluoride, Nitrate, Copper and Lead) during 2020. 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.

License

The Sharts Road System currently has an unconditioned license to operate.

Whom to Contact

For further information about water quality, contact the Warren County Water and Sewer Department. Hours of operation are 7:30 AM and 4:30 PM, Monday through Friday:

Main Office	(513)695-1377	
Superintendent of Operations	(513)683-3687	FAX (513)697-1752

WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

An Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the City of Springboro and Warren County’s Water Laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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.

**** Collected by the Springboro Water Department. (Veolia Water)**

***Collected by the Warren County Water Department**

Compliance Monitoring 2020

Substance	Violation	Level Detected	Range of Detection	MCL	MCLG	Sample Year	Source of Substance
**Fluoride	No	1.16 mg/l	0.82 - 1.16 mg/l	4	4	2020	Erosion of natural deposits; water additive that promotes strong teeth;
**Nitrate	No	.464 mg/l	.464 mg/l	10	10	2020	Runoff from fertilizer use; leaching from septic tanks, sewage.
**Barium	No	.202 mg/l	.202 mg/l	2	2	2019	Discharges from drilling waste
*Chlorine Residual	No	1.9 mg/l	0.2 - 2.0 mg/l	MRDL= 4.0	MRDL= 4.0	2020	Element used for disinfection

Total Coliform samples were collected and analyzed in 2020. 12 samples collected and all samples were total coliform negative and E. coli negative.

The table below lists all the drinking water contaminants that were detected between January 1 and December 31, 2020. The presence of the contaminants in the water does not necessarily indicate that the water poses a health risk.

Sharts Road- Required Monitoring information - 2020

Substance	Violation	Highest Level Detected	Range of Detection	MCL	MCLG	Sample Year	Sources of Substances
*Total Trihalomethane	No	24.7 ug/l	24.7 ug/l	80	0	2020	By-products of drinking water chlorination
Bromodichloromethane	No	7.6 ug/l	7.6 ug/l	80	0	2020	By-products of drinking water chlorination.
Bromoform	No	2.4 ug/l	2.4 ug/l	80	0	2020	By-products of drinking water chlorination
Chloroform	No	8.0 ug/l	8.0 ug/l	80	0	2020	By-products of drinking water chlorination.
Dibromochloromethane	No	6.7 ug/l	6.7 ug/l	80	0	2020	By-products of drinking water chlorination.
*HAA5 (Total Haloacetic Acids)	No	5.2 ug/l	5.2 ug/l	60	0	2020	By-products of drinking water chlorination.
Dichloroacetic Acid	No	1.8 ug/l	1.8 ug/l	60	0	2020	By-products of drinking water chlorination.
Dibromoacetic Acid	No	2.2 ug/l	2.2 ug/l	60	0	2020	By-products of drinking water chlorination.
Monobromoacetic Acid	No	<1.0 ug/l	<1.0 ug/l	60	0	2020	By-products of drinking water chlorination.
Monochloroacetic Acid	No	<1.0 ug/l	<1.0 ug/l	60	0	2020	By-products of drinking water chlorination.
Trichloroacetic Acid	No	1.1 ug/l	1.1 ug/l	60	0	2020	By-products of drinking water chlorination.

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels. **Warren County collected five (5) samples during 2020.**

Substance	Detected	Range of Detection	MCL	MCLG	Sample Year	Sources	Number of Samples Greater Than Action Level
Copper	0.1358ppm 90 th percentile	0.0172- 0.185ppm	AL = 1.3 ppm	1.3 ppm	2020	Piping used in distribution system and house hold plumbing	0
Lead	1.345 ppb 90 th percentile	<5.0 - 2.1ppb	AL = 15 ppb	0 ppb	2020	Piping used in distribution system and house hold plumbing	0

“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 Sharts Road 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for the Richard Renneker Water System

PWSID# 8301512

The Warren County Water Department has prepared the following information for the Richard Renneker Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome.

Water Source

The Richard Renneker Water Treatment Plant withdraws water from three separate well fields. One wellfield is located on the east side of the Little Miami River, about one-half mile southwest of the Powder Plant and two miles north of Foster, Ohio, referenced as the East Wellfield. These nine wells draw water from the Little Miami River Buried Valley Aquifer. The second wellfield, containing five wells, is located southeast of the intersection of Ohio State Route 48 and Mason-Morrow-Millgrove Road, referenced as the Sod Farm Wellfield. The final well field is located south of the Little Miami River and the Sod Farm Wellfield, known as Revis Wellfield. Three wells are located at this location. Both the Sod Farm Wellfield and Revis Wellfield are located in South Lebanon. Both well fields are bounded on the north and east sides by Turtle Creek, on the south by the Little Miami River, and on the west by Ohio Route 48. This is the origin of the Shaker Creek Buried Valley Aquifer and the confluence of the Little Miami River Buried Valley Aquifer. The treatment process consists of iron and manganese removal by aeration, filtration, and the addition of fluoride and chlorine. The Aquifer that supplies the Richard Renneker wellfields have been determined to have a high susceptibility to contamination due to the presence of significant potential contaminate sources in the protection area. However, there is no evidence to suggest that ground water has been impacted by significant levels of chemical contaminants from human activities. Should you need to find your Source Water Assessment Information; the report can be accessed at Ohio EPA's website at the following link, <http://www.epa.ohio.gov/gis/swpa/OH8301512>.

The Richard Renneker Water System also has interconnections for emergency backup purposes. These connections are as follows:

- 17562 State Route 48 South Lebanon, Ohio with Warren County Franklin Clearcreek System
- 3812 Socialville-Foster Road Mason, Ohio with Greater Cincinnati Water Works.

During the year, the Richard Renneker System draws water from the Franklin-Clearcreek Water System. Water is used each day during 2019. On average 105,000,000 gallons were used. The Franklin-Clearcreek water quality report can be found on the website (www.co.warren.oh.us) or by calling the main office of the Warren County Water Department.

Sources of Drinking Water 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, which can be naturally-occurring or results 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Richard Renneker Water System conducted sampling for Bacteria, Nitrate, Copper, Lead, and Disinfection by-Products during 2020. 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.

License

The Richard Renneker Water System currently has an unconditioned (green) license to operate. The license is valid from January 1, 2021 to January 30, 2022.

Whom to Contact

For further information about water quality, contact the Warren County Water and Sewer Department, Hours of operation are 8:00 AM and 5:00 PM, Monday through Friday.

Main Office (513)695-1377

Superintendent of Operations (513) 683-3687

FAX (513) 697-1752

WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

An Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the Warren County Water Laboratory and its contract laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here:

Maximum Contaminant Level or MCL: 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 Goal or 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 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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

Compliance Monitoring and Disinfection Requirements 2020

Substance	Sample Year	Highest Level Detected	Range	Violation	MCL	MCLG	Sources of Substances
Fluoride (mg/L)	2020	1.11	0.8 -1.30	No	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Chlorine (mg/L)	2020	1.4	0.2 - 2.0	No	MRDL= 4	MRDLG= 4	Element used for disinfection

Total Coliform samples were collected and analyzed in 2020. 480 samples collected and all samples were total coliform negative and E. coli negative.

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined, and if it exceeds the Action Level, specific corrective actions are required. **Thirty samples were collected in 2020.**

Substance	Sample Year	Detected	Range	MCL	MCLG	Violation	Number of Samples Greater Than Action Level	Sources
Copper	2020	0.435 ppm 90 th percentile	0 to 1.06 ppm	AL = 1.3 ppm	1.3 ppm	No	0	Piping used in distribution system and house hold plumbing
Lead	2020	3.72 ppb 90 th percentile	0 to 9.6 ppb	AL = 15 ppb	0	No	0	Piping used in distribution system and house hold plumbing

“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 Richard Renneker 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”

Richard Renneker Water System Monitored Analytes Sampled in 2020. (Some compounds listed for previous year).

Substance	Sample Year	Highest Level Detected	Range	Violation	MCL	Ideal Goals (MCLG)	Sources of Substances
Nitrogen, Nitrate-Nitrite	2020	.49 mg/l	.49 - .49mg/l	No	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Cyanide, Total	2019	<0.010 mg/l	<0.010- <0.010mg/l	No	.2	.2	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Barium	2019	0.0981ppm	98.1 – 98.1 ppm	No	2	2	Discharge of drilling waste, metal refineries, erosion of natural deposits

In 2020, 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 were 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.

Ohio’s Statewide PFAS Action Plan for Drinking Water calls for Ohio EPA to gather data from public water systems statewide to determine if PFAS (per- and polyfluoroalkyl substances) are present in drinking water. Under this plan, your water system was sampled for 6 individual PFAS contaminants: PFOA, PFOS, GenX, PFBS, PFHxS, and PFNA. **PFAS were detected in the follow up samples collected from your public water system.** Your results for the samples collected on December 15, 2020 are included below:

PFAS Compound	Statewide Action Level (ng/L)	Your PWS
		EP001 Treated Water (ng/L)
PFOA	>70 single or combined with PFOS	<5
PFOS	>70 single or combined with PFOA	17.7
GenX	>700	<25
PFBS	>140,000	<5
PFHxS	>140	<5
PFNA	>21	<5

These results indicate you have at least one PFAS present in finished water above the reporting level and follow-up monitoring will continue for at least one year from the date of your initial detection.

The tables below list the drinking water contaminants detected between January 1 and December 31, 2020. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk
Richard Renneker Water System monitoring requirement results 2020

Substance	Highest Level Detected	Range Of Detection	Violation	MCL	MCLG	Sample Year	Sources of Substances
Total Trihalo-methanes	20.9 ug/l	14.9 – 20.9 ug/l	No	80	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Bromodichloromethane	6.4 ug/l	4.4 – 6.4 ug/l	No	80	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Bromoform	2.8 ug/l	2.2-2.8 ug/l	No	80	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Chloroform	4.7 ug/l	2.6-4.7 ug/l	No	80	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Dibromochloromethane	7.0 ug/l	5.7-7.0 ug/l	No	80	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Total HAA5 Haloacetic Acid	5.4 ug/l	3.6-5.4 ug/l	No	60	n/a	2020	By-products of drinking water chlorination form when naturally occurring organic matter reacts with chlorine and other disinfectants
Dibromoacetic acid	2.7 ug/l	2.4 – 2.7 ug/l	No	60	n/a	2020	By-products of drinking water chlorination are formed when chlorine reacts with naturally occurring organic matter
Dichloroacetic acid	1.6 ug/l	1.3 – 1.6 ug/l	No	60	n/a	2020	By-products of drinking water chlorination are formed when chlorine reacts with naturally occurring organic matter
Monobromoacetic acid	1.1 ug/l	<1.0-1.1 ug/l	No	60	n/a	2020	By-products of drinking water chlorination are formed when chlorine reacts with naturally occurring organic matter
Monochloroacetic acid	<2.0 ug/l	<2.0 – <2.0 ug/l	No	60	n/a	2020	By-products of drinking water chlorination are formed when chlorine reacts with naturally occurring organic matter
Trichloroacetic acid	<1.0 ug/l	<1.0 - <1.0 ug/l	No	60	n/a	2020	By-products of drinking water chlorination are formed when chlorine reacts with naturally occurring organic matter

During 2020, portions of the Richard Renneker Water system received water from the Franklin-Clearcreek Water system.

The following information explains the water quality for the Franklin-Clearcreek Water system.

From July 16, 2020 to July 23, 2020 the Richard Renneker Water system received water from the Socialville Water system. The information for the Socialville water system is at the end of this report

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for the Franklin-Clearcreek Water System

PWSID# 8301603

The Warren County Water Department has prepared the following information for the Franklin- Clearcreek Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome.

Water Source

The well field is located in northwest Warren County. It is bordered by Trenton-Franklin Road on the north, Twin Creek on the west, the Great Miami River on the south, and the Conrail tracks on the east. This is an area of the confluence of the Twin Creek and Great Miami Buried Valley Aquifers. The water quality is exceptional and does not require treatment other than the addition of fluoride and chlorine. The aquifer that supplies the Franklin-Clearcreek wellfield has been determined to have a high susceptibility to contamination due to the presence of significant potential contaminate sources in the protection area. However, there is no evidence to suggest that ground water has been impacted by significant levels of chemical contaminants from human activities. Should you need to find your Source Water Assessment Information, the report can be accessed at Ohio EPA's website at the following link, <http://www.epa.ohio.gov/ddagw/swap/OH8301603>.

The Franklin-Clearcreek Water System also has several interconnections with surrounding water systems for emergency backup purposes. These connections are as follows:

4151 Lytle Road (Waynesville, Ohio) – Village of Waynesville Water
3050 State Route 73 (Waynesville, Ohio) – Village of Waynesville Water
8656 Bunnell Hill Road (Springboro, Ohio) – City of Springboro/Veolia Water
15 Lytle Five Points Road (Springboro, Ohio) – City of Springboro/Veolia Water
346 Lytle Road Springboro Tower (Springboro, Ohio) City of Springboro/Veolia Water
3763 Beal Road (Franklin, Ohio) – City of Franklin Water
6010 State Route 123 (Franklin, Ohio) – City of Franklin Water
7068 Dixie Hwy (Franklin, Ohio) – City of Franklin Water
6562 Manchester Road (Middletown, Ohio) – City of Middletown Water
2467 State Route 48 (Lebanon, Ohio) – City of Lebanon Water
Hamilton-Mason Road & Butler-Warren Road (Mason, Ohio) Butler County and Greater Cincinnati Water
17562 State Route 48 (South Lebanon, Ohio) – Western Water Company
Brimstone and State Route 73 (Harveysburg, Ohio) – Western Water Company

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Franklin-Clearcreek Water System conducted sampling for Bacteria, Nitrate, Copper, Lead, and Disinfection By-Products during 2020. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants does not change frequently. Some of our data, though accurate, is more than one year old.

License

The Franklin-Clearcreek Water System currently has an unconditioned (green) license to operate. The license is valid from January 1, 2021 to January 30, 2022.

Contact

For further information about water quality, contact the Warren County Water and Sewer Department (WCWSD). Hours of operation are 7:30 AM and 4:00 PM, Monday through Friday:

Main Office (513) 695-1377

Superintendent of Operations (513) 683-3687

FAX (513) 697-1752

WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the Warren County Water Laboratory and its' contract laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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 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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

Compliance Monitoring and Disinfection Requirements 2020

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Fluoride (mg/L)	1.11	0.8 - 1.3	4	4	No	2020	Water additive which promotes strong teeth;
Chlorine (mg/L)	1.8	0.2 - 2.0	MRDL= 4.0	MRDLG= 4.0	No	2020	Element used for disinfection

** November 17, 2020, the Franklin Area Water System had a routine bacteria sample reported as Total Coliform Positive. As required by the Ground Water Rule, the laboratory staff collected three system samples within the vicinity of the original sample and four source water samples. All repeat system samples and four source water samples, reported as Total Coliform Negative/E.coli negative. All water systems are required to begin compliance with the new rule (Revised Total Coliform Rule, April 1, 2016). The new rule maintains the purpose to protect 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 Public Water System.

Franklin-Clearcreek Water System Monitored Analytes Sampled in 2020 (unless noted)

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Barium	0.0826 mg/l	0.0826-0.0826 mg/l	2	2	No	2019	Discharge of drilling waste, metal refineries, erosion of natural deposits
Cyanide, Total	<0.010 mg/l	<0.010-0.010 mg/l	0.2	0.2	No	2019	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Nitrate Nitrite	1.1 mg/l	1.1 – 1.1 mg/l	10	10	No	2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Drinking Water Contaminants Tested in the Franklin-Clearcreek Water System - 2020

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Total Trihalomethanes	24.7 ug/L	10.7-24.7ug/L	80	n/a	No	2020	By-products of drinking water chlorination
Bromodichloromethane	6.5 ug/l	3.0-6.5 ug/l	80	n/a	No	2020	By-products of drinking water chlorination
Bromoform	1.5 ug/l	0.72-1.5 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
Chloroform	13.4	2.6--13.4 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
Dibromochloromethane	4.0 ug/l	3.6 – 4.0 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
HAA5 Haloacetic acids	9.4 ug/l	2.7 – 9.4 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Dibromoacetic acid	1.7 ug/l	1.5 – 1.7 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Dichloroacetic acid	4.0 ug/l	1.0 – 4.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Monobromoacetic acid	1.0	<1.0 - 1.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Monochloroacetic acid	<2.0	<2.0 - <2.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination
Trichloroacetic acid	2.9 ug/l	<1.0 – 2.9 ug/l	60	n/a	No	2020	By-products of drinking water chlorination

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. If the 90th percentile exceeds the Action Level, specific corrective actions are required. **Thirty samples were taken in 2020.**

Substance	Detected	Range	MCL	MCLG	Violation	Sample Year	Sources	Samples Greater Than Action Level
Copper	.141 mg/L 90 th percentile	.0167 to .309 mg/L	AL = 1.3 mg/L	1.3 mg/L	No	2020	Piping used in distribution system, house hold plumbing	0
Lead	4.07ppb 90 th percentile	<2.0 to 11.5 ppb	AL = 15 ppb	0 ppb	No	2020	Piping used in distribution system, house hold plumbing	0

“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 Franklin-Clearcreek 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for the Socialville Water System

PWSID# 8304203

The Warren County Water Department has prepared the following information for the Socialville Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome

Water Source

Water for the Socialville Water System is purchased by Warren County from Greater Cincinnati Water Works. Water is withdrawn from both the Ohio River and the Great Miami Aquifer. Water from the Ohio River is treated at the Miller Treatment Plant which is located on the east side of Hamilton County. Water is also pulled from the Great Miami Aquifer. 13 wells located in the southern part of Butler County produce water that is treated at the Bolton Treatment Plant. Socialville also has an emergency backup system. The connection is located on Socialville-Foster road and is with the Warren County Richard Renneker Water System.

As with all surface waters, The Ohio EPA has classified the Ohio River as highly susceptible to potential contamination. The Ohio EPA has also classified their portion of the Great Miami Buried Valley Aquifer as highly susceptible to contamination. . Should you need to find your Source Water Assessment Information; the report can be accessed at Ohio EPA's at the following link, <http://www.wapp.epa.ohio.gov/gis/swpa/OH8304203>.

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 results 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Socialville Water System conducted sampling for (Bacteria, and Disinfection by-Products) during 2020, collected by the Warren County Water Department. Other analytes were collected and tested by Cincinnati Water Works. 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.

License

The Socialville Water System currently operates with an unconditioned license (Green) to operate. The license is valid from January 1, 2021 to January 30, 2022.

Whom to Contact

For further information about water quality, contact the Warren County Water and Sewer Department. Hours of operation are 7:30 AM and 4:30 PM, Monday through Friday:

Main Office (513)695-1377
Superintendent of Operations (513) 683-3687 FAX (513) 697-1752
WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

An Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the Cincinnati Water Works and the Warren County Water Laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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.

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

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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

Compliance Monitoring and Disinfection Requirements. Warren County Water Department 2020

Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sample Year	Sources of Substances
Chlorine (mg/L)	1.3	0.2 - 2.0	No	MRDL= 4	MRDLG= 4	2020	Element used for disinfection

Total Coliform samples were collected and analyzed in 2020. 180 samples collected and all samples were total coliform negative and E. coli negative.

The following table lists the drinking water contaminants detected between January 1 and December 31, 2020. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. These Substances were tested by *Greater Cincinnati Water Works*

Regulated Contaminants: Contaminants subject to an MCL, Action Level, or (TT) Treatment Technique

Substance	Miller Plant (Ohio River)		Bolton Plant (Great Miami River)		MCL	MCLG	Violation	Sample Year	
	Highest Level Detected	Range of Detection	Highest Level Detected	Range of Detection					
Fluoride	0.88 ppm	0.68-1.04 ppm	0.89 ppm	0.73-1.01 ppm	4	4	No	2020	Erosion of natural deposits; Promote strong teeth.
Nitrate	1.00 ppm	.50-1.00 ppm	1.60 ppm	n/a	10	10	No	2020	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits.
Total Organic Carbon	2.23	1.92-3.25	nr	nr	TT ¹	n.a.	No	2020	Naturally present in the environment.
Turbidity (NTU)	0.09 100% < 0.3 NTU	0.01-0.09	nr	nr	TT ¹ < 1 NTU max and TT2 < 0.3 NTU 95% of the time	n.a. n.a	.No	2020	Soil runoff.
Barium	0.028 ppm	n.a.	0.013 ppm	na	2	2	No	2020	Erosion of natural deposits; Discharge of drilling waste and metal refineries.
Trihalomethanes	55.0 ppb	11.4-68.5 ppb	55.0 ppb	11.4-68.5 ppb	80	0	No	2019	Byproduct of drinking water chlorination
Haloacetic Acids	12.2 ppb	5.09-16.1 ppb	12.2 ppb	5.09-16.1 ppb	60	0	No	2019	Byproduct of drinking water chlorination
Lead (Jan-June) 1 st Set	90 th percentile 5.00 ppb	nd-30.5 ppb	90 th percentile 5.00 ppb	nd-30.5ppb	15	0	No	2020	Corrosion of household plumbing; natural deposits
Copper (Jan-June) 1 st Set	90 th percentile 0.022 ppm	nd-0.066 ppm	90 th percentile 0.022 ppm	nd-0.066 ppm	1.3	0	No	2020	Corrosion of household plumbing systems; erosion of natural deposits; leaching from
Lead (July-Dec) 2 nd Set	90 th percentile 6.00 ppb	nd-41.4 ppb	90 th percentile 6.00 ppb	nd-41.4 ppb	15	0	No	2020	Corrosion of household plumbing; natural deposits
Copper (July-Dec) 2 nd Set	90 th percentile 0.021 ppm	nd-0.043 ppm	90 th percentile 0.021 ppm	nd-0.043 ppm	1.3	0	No	2020	Corrosion of household plumbing systems; natural deposits

¹ The value reported under “highest compliance level detected” for TOC is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value of <1 indicates that the water system is in compliance with TOC removal requirements. A value of >1 indicates a violation of the TOC removal requirements.

***From Cincinnati Water Works, 1st set, “1 out of 134 samples tested during the most recent compliance period were > the Action Level for Lead”. For both Miller Plant and Bolton Plant public water**

*** From Cincinnati Water Works, 1st set “0 out of 134 samples tested during the most recent compliance period were > the Action Level for Copper”. For both Miller Plant and Bolton Plant public water**

****From Cincinnati Water Works, 2nd set, “5 out of 110 samples tested during the most recent compliance period were > the Action Level for Lead”. For both Miller Plant and Bolton Plant public water**

**** From Cincinnati Water Works, 2nd set “0 out of 110 samples tested during the most recent compliance period were > the Action Level for Copper”. For both Miller Plant and Bolton Plant public water**

Note1. The Ohio EPA requires monitoring certain contaminants once per year. The value is the maximum detected concentration.

TT = A required process intended to reduce the level of a contaminant in drinking water

Results of GCWW Voluntary Monitoring for Cryptosporidium: GCWW has tested for Crypto in treated waters and never detected it. GCWW also tested for Crypto in the Ohio River surface water and it was found in 0 of 22 samples during 2015.

Sodium: Tested as water leaves treatment plants Miller Plant: 30mg/ l
Bolton Plant: 30 mg/l. Approximately 4 cups in a liter

Average Water Hardness: Miller Plant - 8 grains per gallon (137 mg/L)
Bolton Plant - 10 grains per gallon (171 mg/l)

Unregulated Contaminants for which the EPA requires monitoring 2020 collected by the *Greater Cincinnati Water Works*

Substance	Miller Plant		Bolton Plant		Violation	MCLG	Sample Year	Sources
	Average Level Detected	Range of Detection	Average Level Detected	Range of Detection				
Chloroform	8.37 ppb	nd – 28.86 ppb	8.37 ppb	nd-28.86 ppb	n.a.	70	2020	Byproduct of drinking water disinfection
Bromodichloromethane	7.27 ppb	1.95-13.45 ppb	7.27 ppb	1.95-13.45 ppb	n.a.	0	2020	Byproduct of drinking water disinfection
Dibromochloromethane	9.60 ppb	3.06-19.81 ppb	9.60 ppb	3.06-19.81 ppb	n.a.	60	2020	Byproduct of drinking water disinfection.
Bromoform	6.22 ppb	nd-16.08 ppb	6.22 ppb	nd-16.08 ppb	n.a.	0	2020	Byproduct of drinking water disinfection.
Monochloroacetic Acid	nd ppb	nd-nd ppb	nd ppb	nd-nd ppb	n.a.	70	2020	Byproduct of drinking water disinfection.
Monobromoacetic Acid	nd ppb	nd-1.88ppb	nd ppb	nd-1.88	n.a.	n.a.	2020	Byproduct of drinking water disinfection.
Dibchloroacetic Acid	3.32 ppb	nd-10.0	3.32 ppb	nd-10.0	n.a.	0	2020	Byproduct of drinking water disinfection.
Trichloroacetic Acid	nd ppb	nd-3.72	nd ppb	nd-3.72 ppb	n.a.	20	2020	Byproduct of drinking water disinfection.
Dibromoacetic Acid	3.02 ppb	1.45-6.08 ppb	3.02 ppb	1.45-6.08 ppb	n.a.	n.a.	2020	Byproduct of drinking water disinfection
Sulfate	58 ppm	43-76 ppm	42 ppm	43-76 ppm	n.a.	n.a.	2020	Erosion of natural deposits

Action Levels (AL) control copper and lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels from the 30 samples collected from the Socialville System residences in 2018.

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Sample year	Violation	Sources	Number of Samples Greater Than Action Level
Copper	90 th percentile 0.0528 ppm	.00514- .157 ppm	AL= 1.3 ppm	0	2018	No	Corrosion of household plumbing; natural deposits	0
Lead	90 th percentile 3.04 ppb	<.5- 3.93 ppb	AL = 15 ppb	0	2018	No	Corrosion of household plumbing; natural deposits	0

“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. Socialville 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”

Unregulated Contaminants for which the EPA required monitoring under the Information Collection Rule to determine where certain substances occur and whether or not the substances should be regulated. Stage II Disinfection by-products monitored by Warren County Water Department. **2020**

Substance	Highest Level Detected	Range of Detection	Violation	MCL	MCLG	Sample Year	Sources of Substances
Total Trihalomethanes	52.9 ug/l	22.8 – 52.9 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Bromodichloromethane	11.7 ug/l	3.2 – 11.7 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Bromoform	17.4 ug/l	0.56-17.4 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Chloroform	20.4 ug/l	0.8 – 20.4 ug/l	No	80	0	2020	By-products of drinking water chlorination.
Dibromochloromethane	21.2 ug/l	5.4 – 21.2 ug/l	No	80	0	2020	By-products of drinking water chlorination.
HAA5 Haloacetic acids	9.3 ug/l	3.9- 9.3 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Bromochloroacetic acid	3.1 ug/l	1.6 – 3.1 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Dibromoacetic acid	6.5 ug/l	1.4 – 6.5 ug/l	No	60	0	2020	By-products of drinking water chlorination
Dichloroacetic acid	5.1 ug/l	<1.0 – 5.1 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Monobromoacetic acid	1.4 ug/l	<1.0-1.4 ug/l	No	60	0	2019	By-products of drinking water chlorination.
Monochloroacetic acid	<2.0 ug/l	<2.0 ug/l	No	60	0	2020	By-products of drinking water chlorination.
Trichloroacetic acid	2.6 ug/l	<1.0 – 2.6 ug/l	No	60	0	2020	By-products of drinking water chlorination

Additional Information

To ensure that tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The sources of drinking water (including 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: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife, (2) inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming, (3) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses, (4) 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, (5) radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities, (6)

Cryptosporidium is a microscopic organism that, when ingested, can result in diarrhea, fever, and other intestinal symptoms. Most healthy people can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised persons to consult their doctor about precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it can be spread through means other than drinking water.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for Pennyroyal Water System

PWSID# 8301803

The Warren County Water Department has prepared the following information for the Pennyroyal Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome.

Water Source

Warren County purchases the water for the Pennyroyal Water System from the City of Springboro (Veolia Water). The City of Springboro obtains its drinking water supply from the buried sand and gravel aquifers associated with the Great Miami River. The City of Springboro has five (5) wells to draw water from the aquifer. The wells are located on the west side of the Great Miami River near 8858 Dayton-Oxford Road. The Water Treatment Plant and well field is south of Chautauqua and borders the Village of Carlisle. Well water is pumped directly to the water treatment plant, where the water is filtered and treated with chlorine and fluoride.

The Pennyroyal Water system is also equipped with an interconnection for emergency purposes. This connection is between Warren County and Montgomery County on Staley Road. The Montgomery County Water report can be found at www.mcoho.org or call (937)781-2500.

The Ohio EPA assessment of the water source that supplies the City of Springboro has a high susceptibility to contamination. Should you need to find your source water assessment information, the report can be accessed at the Ohio EPA's website by typing into the following link, <http://www.wapp.epa.ohio.gov/gis/swpa/OH8301803>

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 results 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Pennyroyal Water System conducted sampling for (Bacteria, chlorine and Disinfection by-Products, Fluoride, Nitrate, Copper and Lead) during 2020. 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.

License

The Pennyroyal Water System currently has an unconditioned (Green) license to operate. The license is valid from January 1, 2021 to January 30, 2022.

Whom to Contact

For further information about water quality, contact the Warren County Water and Sewer Department (WCWSD).

Hours of operation are 7:30 AM and 4:00 PM, Monday through Friday:

Main Office (513)695-1377
Superintendent of Operations (513)683-3687 FAX (513)697-1752
WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

An Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the City of Springboro and Warren County’s Water Laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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 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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

**** Collected by the Springboro Water Department. (Veolia Water)**

***Collected by the Warren County Water Department**

Compliance Monitoring 2020

Substance	Violation	Level Detected	Range of Detection	MCL	MCLG	Sample Year	Source of Substance
**Fluoride	No	1.16 mg/l	0.82 - 1.16 mg/l	4	4	2020	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
**Nitrate	No	.464 mg/l	.464mg/l	10	10	2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
**Barium	No	.202 mg/l	.202 mg/l	2	2	2019	Discharges from drilling waste
*Chlorine Residual	No	1.9 mg/l	0.2 - 2.0 mg/l	MRDL = 4.0	MRDLG= 4.0	2020	Element used for disinfection

Total Coliform samples were collected and analyzed in 2020. 24 samples collected and all samples were total coliform negative and E. coli negative.

The table below lists all the drinking water contaminants that were detected between January 1 and December 31, 2020. The presence of the contaminants in the water does not necessarily indicate that the water poses a health risk.

Pennyroyal- Required Monitoring Information - 2020

Substance	Violation	Highest Level Detected	Range of Detection	MCL	MCLG	Sample Year	Sources of Substances
*Total Trihalomethane	No	30.6 ug/l	17.5 – 30.6 ug/l	80	0	2020	By product of drinking water chlorination
Bromodichloromethane	No	9.1ug/l	5.0 – 9.1ug/l	80	0	2020	By product of drinking water chlorination
Bromoform	No	2.5ug/l	2.2-2.5ug/l	80	0	2020	By product of drinking water chlorination
Chloroform	No	11.6ug/l	4.7 – 11.6ug/l	80	0	2020	By product of drinking water chlorination
Dibromochloromethane	No	7.3ug/l	5.5- 7.3ug/l	80	0	2020	By product of drinking water chlorination
*HAA5(Total Haloacetic Acids)	No	6.9 ug/l	3.7 – 6.9 ug/l	60	0	2020	By product of drinking water chlorination
Bromochloroacetic Acid	No	2.7 ug/l	1.8 – 2.7 ug/l	60	0	2020	By product of drinking water chlorination
Dibchloroacetic Acid	No	2.4 ug/l	2.1 – 2.4 ug/l	60	0	2020	By product of drinking water chlorination
Dibromoacetic Acid	No	2.9 ug/l	1.6- 2.9 ug/l	60	0	2020	By product of drinking water chlorination
Monobromoacetic Acid	No	<1.0	<1.0	60	0	2020	By product of drinking water chlorination
Monochloroacetic Acid	No	<2.0	<2.0	60	0	2020	By product of drinking water chlorination
Trichloroacetic Acid	No	1.6	<1.0-1.6 ug/l	60	0	2020	By product of drinking water chlorination

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels. **The Warren County Water Laboratory collected ten samples in 2020.**

Substance	Detected	Range of Detection	MCL	MCLG	Sample Year	Sources	Number of Samples Greater Than Action Level
Copper	0.115ppm 90 th percentile	0.0277 to .0116 ppm	AL = 1.3 ppm	1.3ppm	2020	Piping used in distribution system and house hold plumbing	0
Lead	3.0 ppb 90 th percentile	0 to 3.0 ppb	AL = 15 ppb	0.0 ppb	2020	Piping used in distribution system and house hold plumbing	0

“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 Pennyroyal 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Website: <http://www.epa.gov/safewater/lead> and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.

Warren County Water and Sewer Department

CONSUMER CONFIDENCE REPORT (CCR)

2020 Water Quality Report for the Franklin-Clearcreek Water System

PWSID# 8301603

The Warren County Water Department has prepared the following information for the Franklin-Clearcreek Water System. Included in this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. This annual water quality report describes the water source, lists test results, and contains important information about drinking water from the previous year. Reporting is a requirement of the Safe Drinking Water Act of 1996. We encourage public participation in our community's future. The Warren County Board of Commissioners meetings are held on Tuesdays at 9:00 A.M. and on Thursdays at 5:00 P.M. The public is welcome.

Water Source

The well field is located in northwest Warren County. It is bordered by Trenton-Franklin Road on the north, Twin Creek on the west, the Great Miami River on the south, and the Conrail tracks on the east. This is an area of the confluence of the Twin Creek and Great Miami Buried Valley Aquifers. The water quality is exceptional and does not require treatment other than the addition of fluoride and chlorine. The aquifer that supplies the Franklin-Clearcreek wellfield has been determined to have a high susceptibility to contamination due to the presence of significant potential contaminate sources in the protection area. However, there is no evidence to suggest that ground water has been impacted by significant levels of chemical contaminants from human activities. Should you need to find your Source Water Assessment Information, the report can be accessed at Ohio EPA's website at the following link, <http://www.epa.ohio.gov/ddagw/swap/OH8301603>.

The Franklin-Clearcreek Water System also has several interconnections with surrounding water systems for emergency backup purposes. These connections are as follows:

4151 Lytle Road (Waynesville, Ohio) – Village of Waynesville Water
3050 State Route 73 (Waynesville, Ohio) – Village of Waynesville Water
8656 Bunnell Hill Road (Springboro, Ohio) – City of Springboro/Veolia Water
15 Lytle Five Points Road (Springboro, Ohio) – City of Springboro/Veolia Water
346 Lytle Road Springboro Tower (Springboro, Ohio) City of Springboro/Veolia Water
3763 Beal Road (Franklin, Ohio) – City of Franklin Water
6010 State Route 123 (Franklin, Ohio) – City of Franklin Water
7068 Dixie Hwy (Franklin, Ohio) – City of Franklin Water
6562 Manchester Road (Middletown, Ohio) – City of Middletown Water
2467 State Route 48 (Lebanon, Ohio) – City of Lebanon Water
Hamilton-Mason Road & Butler-Warren Road (Mason, Ohio) Butler County and Greater Cincinnati Water
17562 State Route 48 (South Lebanon, Ohio) – Western Water Company
Brimstone and State Route 73 (Harveysburg, Ohio) – Western Water Company

Sources of Drinking Water Contamination

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, pond, 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 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 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 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/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 (800-426-4791)**.

About your Drinking Water

The EPA requires sampling to ensure drinking water safety. The Franklin-Clearcreek Water System conducted sampling for Bacteria, Nitrate, Copper, Lead, and Disinfection By-Products during 2020. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants does not change frequently. Some of our data, though accurate, is more than one year old.

License

The Franklin-Clearcreek Water System currently has an unconditioned (green) license to operate. The license is valid from January 1, 2021 to January 30, 2022.

Contact

For further information about water quality, contact the Warren County Water and Sewer Department (WCWSD).

Hours of operation are 7:30 AM and 4:00 PM, Monday through Friday:

Main Office (513) 695-1377

Superintendent of Operations (513) 683-3687

FAX (513) 697-1752

WEB SITE: <http://www.co.warren.oh.us/>

Send correspondence to: **Warren County Water and Sewer, PO Box 530, Lebanon, OH 45036-0530**

Explanation of the Water Quality Data Tables

This report is based upon tests conducted by the Warren County Water Laboratory and its' contract laboratory. Terms used in the Water Quality Tables and in other parts of this report are defined here.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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 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.

(MRL): Minimum Reporting Limit

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. **ppb:** parts per billion

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.

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

Compliance Monitoring and Disinfection Requirements 2020

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Fluoride (mg/L)	1.11	0.8 - 1.3	4	4	No	2020	Water additive which promotes strong teeth;
Chlorine (mg/L)	1.8	0.2 - 2.0	MRDL= 4.0	MRDLG= 4.0	No	2020	Element used for disinfection

** November 17, 2020, the Franklin Area Water System had a routine bacteria sample reported as Total Coliform Positive. As required by the Ground Water Rule, the laboratory staff collected three system samples within the vicinity of the original sample and four source water samples. All repeat system samples and four source water samples, reported as Total Coliform Negative/E.coli negative. All water systems are required to begin compliance with the new rule (Revised Total Coliform Rule, April 1, 2016). The new rule maintains the purpose to protect 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 Public Water System.

Franklin-Clearcreek Water System Monitored Analytes Sampled in 2020 (unless noted)

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Barium	0.0826 mg/l	0.0826-0.0826 mg/l	2	2	No	2019	Discharge of drilling waste, metal refineries, erosion of natural deposits
Cyanide, Total	<0.010 mg/l	<0.010-0.010 mg/l	0.2	0.2	No	2019	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Nitrate Nitrite	1.1 mg/l	1.1 – 1.1 mg/l	10	10	No	2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Drinking Water Contaminants Tested in the Franklin-Clearcreek Water System - 2020

Substance	Highest Level Detected	Range of Detection	MCL	MCLG	Violation	Sample Year	Sources of Substances
Total Trihalomethanes	24.7 ug/L	10.7-24.7ug/L	80	n/a	No	2020	By-products of drinking water chlorination
Bromodichloromethane	6.5 ug/l	3.0-6.5 ug/l	80	n/a	No	2020	By-products of drinking water chlorination
Bromoform	1.5 ug/l	0.72-1.5 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
Chloroform	13.4	2.6--13.4 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
Dibromochloromethane	4.0 ug/l	3.6 – 4.0 ug/l	80	n/a	No	2020	By-products of drinking water chlorination.
HAA5 Haloacetic acids	9.4 ug/l	2.7 – 9.4 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Dibromoacetic acid	1.7 ug/l	1.5 – 1.7 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Dichloroacetic acid	4.0 ug/l	1.0 – 4.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Monobromoacetic acid	1.0	<1.0 - 1.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination.
Monochloroacetic acid	<2.0	<2.0 - <2.0 ug/l	60	n/a	No	2020	By-products of drinking water chlorination
Trichloroacetic acid	2.9 ug/l	<1.0 – 2.9 ug/l	60	n/a	No	2020	By-products of drinking water chlorination

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. If the 90th percentile exceeds the Action Level, specific corrective actions are required. **Thirty samples were taken in 2020.**

Substance	Detected	Range	MCL	MCLG	Violation	Sample Year	Sources	Samples Greater Than Action Level
Copper	.141 mg/L 90 th percentile	.0167 to .309 mg/L	AL = 1.3 mg/L	1.3 mg/L	No	2020	Piping used in distribution system, house hold plumbing	0
Lead	4.07ppb 90 th percentile	<2.0 to 11.5 ppb	AL = 15 ppb	0 ppb	No	2020	Piping used in distribution system, house hold plumbing	0

“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 Franklin-Clearcreek 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. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure: Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>, and Ohio EPA: Learn About Lead: <http://epa.ohio.gov/pic/lead.aspx>.”