

Drinking Water Consumer Confidence Report (CCR)

2022

JCWSD Service Area A
OEPA PWS ID OH4100803

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JEFFERSON COUNTY WATER AND SEWER DISTRICT

For Service Area A (OEPA PWS ID OH4100803)

Drinking Water Consumer Confidence Report For 2022

Section 2: Introduction

The Jefferson County Water and Sewer District (JCWSD) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Section 3: Source Water Information

The JCWSD does not own a water treatment plant. Therefore, it must purchase all the water it delivers to its customers from various suppliers. The vast network of pipelines, storage tanks, and booster pump stations used to distribute water by the JCWSD are divided into different service areas. The 2022 water supplier(s) for Service Area A was:

SERVICE AREA	SUPPLIER
<i>A, New Alexandria, CR. 19, SR 151 Piney Fork, State Route 152, Smithfield</i>	<i>Brilliant Water and Sewer District</i>

For 2022, The Brilliant Water & Sewer District’s water source comes from three (3) ground wells. They are located at two different locations on Market Street in Brilliant, Ohio. The new water treatment plant, which went into service in late November 2019, is located on LaBelle Street. The wells are designated as ground water supply, meaning that no surface water enters their well supply. The water was treated with polyphosphate solution, and then chlorinated with Sodium Hypochlorite before it enters the system.

A full Source Water Protection Plan Report for the Brilliant Water and Sewer District is available for viewing at the office located at 706 2nd Street, Brilliant, Ohio.

Susceptibility Analysis: The susceptibility of the aquifer (source of drinking water) to contamination was determined by evaluating: (1) available site-specific and regional information (i.e., aquifer material, topography, soils, rate of ground water recharge, etc.), (2) pollution potential rating of the drinking water source protection area, (3) available ground water quality data, and (4) potential contaminant sources that were identified within the drinking water source protection area. The results of this evaluation indicate that the aquifer within the protection area has a high susceptibility because of the following reasons:

1. Well log information suggests no significant low-permeability protective layer between the aquifer and the ground surface, which if present, could provide protection from contamination; and
2. Potential significant contaminant sources exist within the protection area, both in Ohio and West Virginia.

A high susceptibility rating of the aquifer does not imply that the wellfield will become contaminated. It only means that the existing/known aquifer conditions are such that **ground water within the aquifer** could become impacted if the potential contaminant sources are not appropriately managed.



Section 4: What are the sources of contamination to drinking water?

The sources of both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Section 5: Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Section 6: About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The JCWSD, and the Brilliant Water System conducted sampling for sampling for Chlorine; Iron and Manganese; Inorganics (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Nickel, Selenium, Thallium); Nitrate; Synthetic Organic Chemicals (SOC) (Alachlor, Atrazine, Simazine); Volatile Organic Chemicals (VOC); Coliform, Lead and Copper, Disinfection Byproducts - Haloacetic Acids (HAA5) and TTHMs (Total Trihalomethanes) during 2022. Samples were collected for many different contaminants, but only those substances that are listed below were found in the water. 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 the data, though accurate, is more than one year old.

Section 8A: Tables of Detected Contaminants

Listed below is information on those contaminants that were found in the JCWSD Water System as the result of monitoring by the JCWSD and the Brilliant Water and Sewer District. (Contaminants sampled by the JCWSD are marked with an *).



Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Residual Disinfectants *							
Chlorine (as CL2) (ppm) *	MRDLG = 4	MRDL = 4	1.119	1-1.22	No	2022	Water additive used to control microbes
Disinfectant and Disinfectant By-Products *							
Haloacetic Acids (HAA5) (ppb) *	N/A	60	18.00	9.6-18.00	No	2022	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) *	N/A	80	65.50	35.60-65.5	No	2022	By-product of drinking water disinfection
Lead and Copper *							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb) *	15 ppb	0	3.5 ppb	No	2022	Corrosion of household plumbing systems; erosion of natural deposits	
						2 out of 80 samples were found to have lead levels in excess of the lead action level of 15 ppb.	
Copper (ppm) *	1.3	0	0.972 ppm	No	2022	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	
						5 out of 80 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.	



2022 Table of Detected Contaminants Brilliant Water and Sewer District								
Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections		Violation	Sample Year	Typical Source of Contaminants
				Low	High			
Inorganic Contaminants								
Barium (ppm)	2	2	.0527	NA	.0468	No	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	1.91	NA	1.91	No	2021	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium	0.5	2	<1.0	<1	<1	No	2021	Leaching from ore-processing sites; and discharge from electronics, glass, and drug factories

Section 10: Violations and Exceedance Levels

1) JCWSD CCR Notice of Violation 2021

For 2021, Jefferson County Water and Sewer District A is in violation of Ohio Administrative Code (OAC) Rule 3745-96-01-04 for failure to comply with the CCR Requirements. The required Table of Detected Contaminants was incomplete and/or inaccurate in the report. For each detected contaminant, the Table should show the level for each contaminant detected in the water, the Maximum Contaminant Level (MCL), the Maximum Contaminant Level Goal (MCLG), and the likely or known source of that contaminant. There are several violations noted:

- a) The 90th Percentile reported in the CCR for lead and/or copper was incorrect. For lead and copper the 90th percentile should be reported for the level found. The 90th percentile for copper should be 1.63 ppm, not 2.27 ppm. The 90th percentile for lead should be 3.1 ppb, not 0 ppb.
- b) The number of samples over the action level (AL) for copper should be 4, not 3.
- c) The level found for HAA5 should be 2.7 ppb with a range of 2.6-2.7 ppb.
- d) The level found for TTHM should be 12.3 ppb with a range of 9.6-12.3 ppb.

The above violations were revised, and corrected table for 2021 for Detected Contaminants can be seen below:



Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Disinfection By-Products							
TTHMs (Total Trihalomethanes) (ppb) *	NA	80	12.3	9.6-12.3	No	2021	By-product of drinking water disinfection
HAA5s (Haloacetic Acids) (ppb) *	NA	60	2.7	2.6-2.7	No	2021	By-product of drinking water disinfection
Lead and Copper *							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb) *	15 ppb	0	3.1 ppb	No	2021	Corrosion of household plumbing systems; Erosion of natural deposits	
	0 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm) *	1.3	3	1.63 ppm	Yes	2021	Corrosion of household plumbing systems; Erosion of natural deposits	
	4 out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

2) JCWSD Monitoring Notice of Violation 2021

For 2021, Jefferson Water County and Sewer District did not meet the Monitoring Requirements for Sewer District A, and received Drinking Water Notice. The Notice can be seen below.

Drinking Water Notice

Monitoring requirements not met for Jefferson County Water and Sewer District A

We are required to monitor your water for corrosion control indicators. Jefferson County Water and Sewer District A failed to collect the appropriate number of water quality parameter samples required and failed to report water quality parameter results on time to Ohio EPA for the September 2021 reporting period.

- What Should I Do?**

This notice is to inform you that Jefferson County Water and Sewer District A did not monitor, and report results for corrosion control indicators as required by Ohio EPA for the September 2021 reporting period. You do not need to take any actions in response to this notice.



- **What is being Done?**

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for above-mentioned parameters. Jefferson County Water and Sewer District A will take steps to ensure that adequate monitoring will be performed in the future.

Additional information may be obtained by contacting Jefferson County Water and Sewer District A at:

Contact Person: Jonathan Sgalla

Phone Number: 740.283.8577

Mailing Address: 596 State Route 43, Wintersville, OH 43953

PWSID: OH4100803 Facility ID: 4155310 Violation ID: 53

Section 13: Lead Educational Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. JCWSD and Brilliant Water Department are responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Section 18: License to Operate (LTO) Status Information

The Jefferson County Water and Sewer District's A, New Alexandria, CR. 19, SR 151 Piney Fork, State Route 152, Smithfield Water System has a current, unconditional license to operate our water system.

Section 20: Public Participation and Contact Information

- **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of the Jefferson County Board of Commissioners which meets every Thursday morning at 9:00 A.M. at 301 Market Street, Steubenville, Ohio 43952.

- **Obtaining more information:**

If you would like more information on your drinking water, you can contact Michael S. Eroshevich of the JCWSD at (740) 283-8577 or via email at meroshevich@jcwatersewer.com.

Section 21: Definitions of some terms contained within this report:

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant levels (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Parts per Million (ppms) 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 (ppbs) 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.



- Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- 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.
- 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.
- 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).
- The “>” symbol: A symbol which means “greater than”.