

# Cedarville University Water System

## Consumer Confidence Report For 2022

The Cedarville University Water System has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

To continue providing quality drinking water to population of Cedarville University the following projects have taken place over the past year and are planned for the coming year...

Well #14 Rehab project was completed in June of 2022. This included cleaning and video inspection as well as the installation of a new 85gpm pump and pipe.

The 2" service line to 2912 Cedarville-Yellow Springs Rd (Shrubsole House) was decommissioned in preparation for construction of a new dorm. Service at this address was reconnected to the 4" line originating at the HSC.

Well #12 is on the schedule for a Rehab project in the spring of 2023. The well will be cleaned and flushed, followed with a video inspection of the entire well. The current pump will be inspected and replaced if necessary. We are also hoping to Rehab one more well by the end of 2023, depending on funding and results of our ongoing wellfield study.

Well #15. We are currently awaiting approval from the EPA to bring this well online.

Approximately 134 Linear Ft of service line was relocated to allow for the construction of the Scharnberg Business Center. 10" and 6" ductile Iron Pipe was replaced with 10" PCV C900 piping.

We have many preventive maintenance projects planned for the Water System this summer to include...

- Replacing one High Service Pump. The pump has been purchased and is awaiting installation. This will help to ensure that we can continue to provide sufficient water to our system.
- Cleaning and Inspection of our 30,000 Clearwell which is used for storage of filtered water.
- External Cleaning and Inspection of our Water Tower.

With the ongoing growth of our campus population, we have begun working with local experts in Hydrology, Geology and Water Treatment Systems to develop a long-term plan ensuring we have adequate source water supply and the ability to treat this water. In the Summer of 2022, we began gathering data related to our wellfield and the supply aquifers to help us create a conceptual site survey. This will guide us as we plan for expansion of our well field and help us to operate our current wells at peak efficiency. We have also entered a partnership with a Civil Engineering firm to help us plan for future expansion of our Water Treatment Plant and Distribution Systems.

## Source Water Information

The Cedarville University Water System receives its drinking water from wells located to the east and north of the intramural fields east of 72. There are seven water supply wells which draw water from both the upper and lower bedrock aquifers. The well fields are located within the Till Plains section of the Central Lowlands physiographic province. They are supplied by two bedrock aquifers of the Sub-Lockport Group.

The aquifer that supplies drinking water to the Cedarville University's East Wellfield has a moderate susceptibility to contamination, due to the moderate sensitivity of the aquifer in which the drinking water wells are located and the presence of potential contaminant sources. This does not mean that this wellfield will become contaminated, but that those conditions are such that the ground water could be impacted by potential contaminant sources. Future contamination is being avoided by the implementation of protective measures outlined in our Wellhead Protection Plan. Copies of the Source Water Assessment report prepared for The Cedarville University and the Wellhead Protection Plan are available by contacting the Operations Center at 937-766-7772.

The Cedarville University Water System also has an Emergency connection with The Village of Cedarville, OH & Greene County Water System. During 2022 we did not use any water from this emergency connection. This connection is used for emergency situations and is not utilized throughout a normal year. This report does not contain information on the water quality received from The Village of Cedarville, OH, & Greene County Water System, but a copy of their consumer confidence report can be obtained by contacting the Greene County Engineers at (937) 562-7450.

### What are sources of contamination to drinking water?

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

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally- occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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

## Who needs to take special precautions?

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

## About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Cedarville University Water System conducted sampling for Bacteria; Chlorine; Arsenic; Nitrates; SOC's & Disinfection Byproducts during 2022. Samples were collected for a total of six different contaminants, most of which were not detected in the Cedarville University water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.



## Table of Detected Contaminants

Listed below is information on those contaminants that were found in the Cedarville University Water System drinking water.

| TABLE OF DETECTED CONTAMINANTS                   |   |          |                                |                                   |           |              |   |
|--|---|----------|--------------------------------|-----------------------------------|-----------|--------------|---|
| Contaminants (Units)                             | MCLG  | MCL      | Level Found                    | Range of Detections               | Violation | Sample Year  | Typical Source of Contaminants  |
| <b>Disinfectant and Disinfectant By-Products</b> |   |          |                                |                                   |           |              |   |
| Total Chlorine (ppm)                             | MRDLG = 4   | MRDL = 4 | 1.75                           | 1.5-1.9                           | No        | 2022         | Water additive used to control microbes   |
| Haloacetic Acids (HAA5) (ug/l)                   | N/A   | 60       | 11.4                           | 0.0-11.4                          | No        | 2022         | By-product of drinking water disinfection   |
| Total Trihalomethanes (TTHM) (ug/l)              | N/A   | 80       | 48.3                           | 5.7-48.3                          | No        | 2022         | By-product of drinking water disinfection   |
| <b>Inorganic Contaminants</b>                    |   |          |                                |                                   |           |              |   |
| Fluoride (ppm)                                   | 4   | 4        | 0.4                            | 0.4                               | No        | 2020         | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Barium (ppm)                                     | 2   | 2        | 0.0506                         | 0.0506                            | No        | 2020         | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits                                |
| Nitrate (ppm)                                    | 10  | 10       | 0.654                          | 0.654-0.654                       | No        | 2022         | Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits                              |
| <b>Lead and Copper</b>                           |   |          |                                |                                   |           |              |   |
| Contaminants (units)                             | Action Level (AL)   | MCLG     | Individual Results over the AL | 90% of test levels were less than | Violation | Year Sampled | Typical source of Contaminants  |
| Lead (ppb)                                       | 15 ppb  | 0 ppb    | 0                              | 0                                 | No        | 2020         | Corrosion of household plumbing systems;  |
|  | 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 ppm   | 1.3 ppm  | 0                              | 0.235                             | No        | 2020         | Erosions of natural deposits; leaching from   |
|  | 0 out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm. |          |                                |                                   |           |              |   |

## PFAS Educational Information

In 2020, our PWS was sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit [pfas.ohio.gov](https://pfas.ohio.gov)

## 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. Cedarville University Water System is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## License to Operate (LTO) Status Information

In 2022 we had an unconditioned license to operate our water system.

## Public Participation and Contact Information

How do I participate in decisions concerning my drinking water?

While we do not hold regular meetings, public participation and comment are encouraged. To participate or for more information on your drinking water contact the Cedarville University Operations Center at 937-766-7772



## 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 level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

The “<” symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.