



2021

Drinking Water Consumer Confidence Report

Introduction

The Village of Yellow Springs 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.

Source Water Information

In 2017 The Village completed a new 1.0 Million Gallons a Day (MGD) iron and manganese removal groundwater treatment plant. The new treatment plant consist of two aerators, two pellet sand softeners and three gravity sand filters. The new plant has been online and producing water since December 2017. **The average water hardness in 2021 was 229 mg/l (13.4 gpg).**



Yellow Springs water is groundwater that is produced from 5 wells located along the Little Miami River near Jacoby Road. The wells vary in depth from 60' to 130'. The raw water is pumped to the Water Treatment Plant, where it is aerated, softened, filtered, and disinfected prior to it being pumped to the water customers of the Village of Yellow Springs.

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).

The Ohio EPA has prepared a source water assessment plan for The Village of Yellow Springs. It states: The aquifer that supplies drinking water to the Village of Yellow Springs wellfield is susceptible to contamination. This determination was made because of the following reasons:

- Samples of untreated water collected at Yellow Springs between 1991 and 1999 contained detectable levels of 1,1-dichloroethane;
- The sand and gravel aquifer has a shallow depth to water, less than 15 feet below the ground surface;
- The soils are primarily loams which allow for rapid infiltration;
- The topography ranges from relatively flat, allowing for most of the recharge to infiltrate into the ground instead of running off to steeply sloping with significant runoff;
- No confining layer exists which could act as a barrier between the ground surface and the aquifer; and
- Potential contaminant sources exist within the protection area.

Consequently the likelihood for contamination of the source water at Yellow Springs is high unless the potential contaminants are handled carefully by implementing appropriate protection strategies.

A copy of the full report is available. Contact **Brad Ault at 767-7208** for a copy of the full report.

Who needs to take special precautions?

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

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Village of Yellow Springs conducted sampling for bacteria, lead and copper, nitrite, nitrate, radiologicals, SOC'S, VOC'S and disinfection by products (TTHM and total haloacetic acids(HAA5) during 2021. Samples were collected for a total of 50 different contaminants most of which were not detected in the Yellow Springs 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 **Village of Yellow Springs** drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Nitrate	10 mg/l	10 mg/l	0.18 mg/l	0.179 mg/l-0.8 mg/l	None	2021	Run off from fertilizer use; Erosion of natural deposits
Residual Disinfectants							
TTHM (Total Trihalomethanes)	N/A	80 ppb	25.9 ppb	12.9 ppb-25.9 ppb	None	2021	By-product of drinking water chlorination
Haloacetic Acids HAA5 (ppb)	N/A	60 ppb	6.4 ppb	2.9 ppb – 6.4 ppb	None	2021	By-product of drinking water chlorination.
Chlorine (ppm)	MRDLG= 4	MRDL= 4	0.95	0.73-1.13	None	2021	Water additive used to control microbes
Radiologicals							
Radium-228	0 pCi/L	5 pCi/L	1.3 pCi/L	None	None	2020	Erosion of natural deposits
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 (ug/l)	15 ug/l	N/A	3.9 ug/l	None	2021 June-Sept.	Corrosion of household plumbing system	
	0 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ug/l.						
Copper (mg/l)	1.35 mg/l	N/A	0.085 mg/l	None	2021 June-Sept.	Corrosion of household plumbing system	
	0 out of 20 samples were found to have copper levels in excess of the copper action level of 1.35 mg/l.						

TABLE OF DETECTED CONTAMINANTS

1,1-Dichloroethane: 1,1-Dichloroethane was detected in raw well #1(which produces 75 gpm and is only used as monitoring well not a production well) at a level of 0.810 ppb. The MCL of 1,1-Dichloroethane is 5.0 ppb.

Perfluorooctanesulfonic Acid (PFOS) was detected in raw well #2 (which is a production well) at a level of 9.67 ng/L(ppt). U.S. EPA set Health Advisory Level(HAL) at 70 ppt.

Lead Educational Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Yellow Springs 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 2021 we had an unconditioned license to operate our water system.

Public Participation Information/ Contacts

Village Manager: Josué Salmerón, 767-3402

Water Treatment Plant Superintendent: Bradley Ault, 767-7208

Village Billing Office: 767-7202

Water Treatment Plant: 767-7208

How do I participate in decisions concerning my drinking water?

VILLAGE COUNCIL MEETINGS - Any person wishing to comment on the water quality or the water system is encouraged to do so by attending the Village Council Meetings held the first and third Monday of each month in the Council Chambers on the second floor of the Bryan Community Center, beginning at 7:00 p.m. Information about council meetings can be obtained by contacting the Clerk of Council at 767-9126.

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.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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.
- **Picocuries per Liter (pCi/L):** a common measure of radioactivity.
- **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.
- **Grains per Gallon (gpg):** A unit of water hardness that most home softener systems use to adjust proper salt feed.
- **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.
- **N/A: Not Available**