

# **Village of Plain City Drinking Water Consumer Confidence Report for Year 2021**

## **Introduction**

The Village of Plain City is pleased to present 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, information on how to participate in decisions concerning your drinking water, and water system contacts.

2021 marked the third year of a multi-year plan to make significant upgrades to the Village's water distribution system. Water valves were replaced in several locations throughout the community, primarily located in the northeastern portion of the Village. The Village also completed the replacement of an additional 5-6 water main valves in 2022 and upgraded a main distribution line leading from the water treatment plant in order to improve future water system pressure and flow volumes as the community continues to grow.

## **Source Water Information**

The Village of Plain City receives its drinking water from two groundwater wells from the Newburg Zone. Both of the wells are over 400 feet deep and are encased to over 100 feet. The treatment consists of air oxidation and filtration for removing offensive compounds such as sulfur, iron, and manganese, in exchange for water softening, and chlorine for disinfection.

The aquifer (water-rich zone) that provides water to the Village of Plain City has a low susceptibility to contamination. This determination is based on the following:

- Presence of a thick protective layer of clay overlying the aquifer;
- Significant depth (over 400 feet below ground surface) of the aquifer;
- No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities; and
- No presence of significant potential contaminant sources in the protection area.

This susceptibility means that under current existing conditions, the likelihood of this aquifer becoming contaminated is relatively low. This likelihood has been minimized by implementing appropriate protective measures, such as upholding the wellhead protection area around the wells.

Copies of this report are available by contacting Haley Lupton, Village Administrator, at [hlupton@plain-city.com](mailto:hlupton@plain-city.com) or at 614-873-3527.

## **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, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Federal Drug Administration (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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### **Who Needs to take Special Precautions**

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

### **About your Drinking Water**

The EPA requires regular sampling to ensure drinking water safety. The Village of Plain City conducted sampling for total coliform bacteria, inorganic contaminants (nitrates, nitrites, iron, manganese, sodium, and chlorine), and disinfection byproducts (haloacetic acid compounds and total trihalomethanes) during 2021. The last lead and copper sampling occurred in 2021 and will take place again this year (2022). 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.

### **Monitoring and Reporting Violations and Enforcement Actions**

The Village of Plain City is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

The Village of Plain City was informed by the Ohio EPA that a significant deficiency of ‘No Asset Management Plan’ was identified on February 8, 2022. The deficiency will be corrected by December 2022.

The Village of Plain City was informed by the Ohio EPA that a significant deficiency of ‘non-adequate hatches on the underground brine storage tank’ was identified on February 8, 2022. The deficiency was corrected in May 2022.

In January of 2021, the Ohio Environmental Protection Agency (OEPA) issued a notice of violation to the Village for failure to report drinking water samples for total coliforms as required by Ohio Administrative Code (OAC) Rule 3745-81-51. The rule requires five monthly samples to be taken and the testing results reported to OEPA. Although the required number of samples were taken and submitted to the Village’s third-party testing lab, only four sample results were ultimately reported to OEPA due to a lab error. Residents were notified of this violation in a letter sent out on February 1, 2022.

## Table of Detected Contaminants

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

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Inorganic Contaminants</b>							
Nitrate (mg/L)	10	10	0.570	NA	No	2021	Runoff from fertilizer use; Erosion of natural deposits
Fluoride (mg/L)	4	4	1.66	NA	No	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Barium (mg/L)	2 mg/L	2 mg/L	.004	NA	No	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ug/L)	.004 mg/L	.004 mg/L	0.3	NA	No	2021	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cyanide (ug/L)	.2mg/L	.2 mg/L	1 ug/L	NA	No	2021	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
<b>Disinfection Byproducts</b>							
Total Trihalomethanes TTHMs (µg/L)	NA	80 ug/L	.040	13.03-40.1 ug/L	No	2021	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5) (ug/L)	NA	60 ug/L	N/D	N/D	No	2021	By-product of drinking water chlorination
<b>Residual Disinfectants</b>							
Total Chlorine (mg/L)	4.0	4.0	2.2	1.3 to 2.2	No	2021	Water additive used to control microbes
<b>Radionuclides</b>							
Gross Alpha (including Uranium & Radon) (pCi/L)	0	15.0	2.37	NA	No	2021	Erosion of natural deposits; contamination caused by human activities
<b>Lead and Copper</b>							
Contaminants (Units)	Action Level (AL)	Individual Results over AL	90 <sup>th</sup> Percentile	Violation	Sample Year	Typical Source of Contaminants	
Lead (µg/L or ppb)	15	1	13.2 ug/L	No	2021	Corrosion of household plumbing systems; erosion of natural deposits	
0 out of 20 samples were above the lead action level of 15 ppb							

Copper, free (mg/L or ppm)	1.3	None	0.144	No	2021	Corrosion of household plumbing systems; erosion of natural deposits
	0 out of 20 samples were above the lead action level of 1.3ppm					

## **Lead in Drinking Water**

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 Plain City 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 or at <http://www.epa.gov/safewater/lead>.

## **Backflow Prevention**

Backflow is defined as ‘a reversal of the normal direction of flow within a piping system’. If backflow occurs, it presents the possibility that contaminants could be introduced into the municipal water system. To prevent this from occurring, a backflow preventer (BFP) must be installed in places that have a high likelihood of causing backflow in the public water system, such as commercial user accounts and residential users with sprinkler systems.

Plain City has a policy that all commercial and residential accounts that have sprinkler systems installed must have the proper BFP installed and that BFP must be inspected annually by a Department of Commerce certified inspector, with the inspection report being sent to the Village at the following address.

Village of Plain City  
Attn: Water Operator  
800 Village Boulevard  
PO Box 167  
Plain City, Ohio 43064

Another alternative is to email the completed report to [village@plain-city.com](mailto:village@plain-city.com).

Inspections should be completed annually before August 31<sup>st</sup>. More information can be found at [plain-city.com](http://plain-city.com).

## **License to Operate Status Information**

The Village of Plain City has a current, unconditioned license to operate its water system.

## **How do I Participate in Decisions Concerning my Drinking Water**

Public participation and comment are encouraged at regular meetings of Village Council, which meets the second and fourth Monday of each month at 800 Village Boulevard, Plain City, Ohio 43064.

For more information on your drinking water contact Haley Lupton, Village Administrator, at (614) 873-3527, ext. 119.

## **Definitions of Terms Contained within this Report**

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

which a water system must follow.

**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 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 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.

**Parts per Billion (ppb) or Micrograms per Liter ( $\mu\text{g}/\text{L}$ ):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Parts per Million (ppm) or Milligrams per Liter ( $\text{mg}/\text{L}$ ):** Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

**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.