Pioneer Water Department 2023 Consumer Confidence Report



Village of Pioneer 409 S. State St. Pioneer, Ohio 43554

www.villageofpioneer.org

Village of Pioneer Public Water System

Drinking Water Consumer Confidence Report For calendar year 2023

Introduction

The Village of Pioneer has prepared the following report to inform you, the consumer, about the quality of our drinking water. This report includes general health information, water quality test results, and how to participate in decisions concerning your drinking water and water system contacts.

Source Water Information

The Pioneer Water Department receives its water from aquifers near the Village. Water was withdrawn by three wells, which pumped approximately 260,000 gallons per day in 2023. The State of Ohio performed an EPA assessment of Pioneer's source water in 2003. That assessment indicated that Pioneer's source of drinking water has a low susceptibility to contamination due to the following:

- * The presence of a moderately thick protective layer of clay overlying the aquifer.
- * The significant depth of the aquifer below ground is over 25 feet.
- * No evidence to suggest that groundwater has been impacted due to significant levels of chemical contaminants from human activities
- No apparent significant potential contaminant sources in the well field protection area

The above-stated Low susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively low. This likelihood of contamination can be minimized by implementing appropriate protective measures.

Our low level of susceptibility is subject to revision if new potential contaminate sources are sited within the protection area or if water sampling indicates contamination by a manmade contaminate source. Copies of the "Source Water Assessment Report" prepared for Pioneer can be obtained by calling Anthony Burnett, the Village Administrator, at 419 737 2614.

What are the sources of contamination in 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. It can also pick up substances resulting from the presence of animals or 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 stormwater 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 stormwater 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 stormwater 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 quantity 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 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 healthcare 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. In 2023, the Pioneer Water Department conducted sampling for bacteria (total coliform), heavy metals (lead and copper), Disinfection by-products (haloacetic acids and trihalomethanes), total chlorine, iron, and nitrates.

Due to recent water concerns throughout the United States, Pioneer residents should know that neither lead nor copper exceeded EPA limits in 2023. Several contaminates are not listed in the following "Table of Detected Contaminates" because the EPA prohibits listing chemicals that were not detected. The few numbers of contaminates listed in the table are indicators of Pioneer's excellent water quality.

The Ohio EPA requires Pioneer to monitor drinking water for some contaminants less than once per year because concentrations of those contaminants do not change frequently. Consequently, some of the table data is more than one year old.

In 2023, the Village had an unconditioned license to operate our water system. The system provides high-quality, safe-to-drink water at a very competitive price. The quality of our water is excellent because it is groundwater that is pumped from a water-rich zone of sand and gravel aquafers covered by more than twenty-five feet of low-permeability material. The covering provides significant protection from surface contamination of an abundant source of groundwater. This high-quality water is pumped from the village well field, consisting of three wells located adjacent to the water treatment plant, where iron, taste, and odor are removed through pressure filtration.

Table of Detected Contaminants

Listed below is information on contaminants found in the Pioneer Water Department's drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Radioactive Cont	aminants						
Gross alpha excluding radon & uranium (pCi/L)	0	15	3.47	3.47 - 3.47	No	2022	Erosion of natural deposits;
Inorganic Contan	ninants						
Nitrate (ppm)	10	10	.31	.3131	No	2023	Runoff from fertilizer use; leaching from septic tanks, sewage, Erosion of natural deposits.
Barium (ppm)	2	2	.196	.196196	No	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1.07	1.07 - 1.07	No	2022	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Arsenic (ppb)	0	10	0.9	,99	No	2022	Erosion of natural deposits: Runoff from orchards, storm-water runoff from glass, and electronics production wastes.
Volatile Organic	Contamin	ants					
Ethylbenzene (ppb)	700	700	0.04	.0404	No	2022	Discharge from petroleum refineries.
Disinfectants, inc	luding Di	sinfecta	nt By-Pro	ducts			HARAMIT
Total Chlorine (ppm)	MRDLG =	MRDL =	0.76	0.72 to 0.86	No	2023	Water additive used to control microbes
Total Trihatomethanes,	N/A	80	29.8	28.1 to 29.8	No	2023	A by-product of drinking water chlorination
Haloacedic Acids HAA5 (ppb)	N/A	60	6.4	0.0 to 6.4	No	2023	A by-product of drinking water chlorination
Lead and Copper	4	•		-			
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 or ug/l 15		0		1.1	No	2023	Corrosion of household plumbing systems. Erosion of natural deposits.
MCLG = 0 ppb	0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppm.						
Copper (ppm or mg/l) MCLG = 1.3 ppm	1.3	0		0.109	No	2023	Corrosion of household plumbing systems.
	0 out of 1	0 out of 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.					

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 Pioneer Water Department is responsible for providing high-quality drinking water but cannot control the various 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.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of the village council at the Community Center. Meetings are held at 7 pm on the second Monday of the month. However, the council meeting may occasionally be postponed and rescheduled if the village council calls for a special meeting. It may also be postponed and rescheduled if the attendance is inadequate to obtain a forum of village council members. When possible, the village will reschedule meetings and publish the new schedule in the Bryan Times to inform the public of the rescheduled date and time.

To whom can I ask questions or request a printed report?

For more information on your drinking water and this Consumer Confidence Report or to request that a paper copy be delivered to your residence, please feel free to contact Anthony Burnett, the Village Administrator, or Bob Seigneur, the water plant operator, at (419) 737 2614.

Backflow Prevention and Cross-Connection Information

If you believe you observed a potential cross-connection or if you have questions regarding backflow prevention, please contact Village offices at (419) 737-2614. For more information regarding Backflow Prevention and Cross-Connection Control, please visit the following website: http://www.villageofpioneer/departments/backflow-prevention.

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 contaminant level 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 disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the 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 contaminate which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for the 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 the 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.
- Picocuries per liter (pCi/L): A common measure of radioactivity.
- Not applicable (n/a): There was no "range of detection" because only one analysis was required for the contaminate.