# WORTHINGTON FIRE DISTRICT

POBOX533 WORTHINGTON, MA01098 413-238-5344

# 2023 DRINKING WATER QUALITYREPORT

PWS#1349000

#### YOUR DRINKING WATER SOURCE

The water sources for the Worthington Fire District consist of seven rock wells and three spring boxes. The sources are located on Ridge Road between Buffington Hill Road and Cold Street. During years with normal rainfall, the springs supply all the water for the system from mid-October until the end of June. Occasionally, when the rainfall has been abundant, the springs will supply the town with water for eight or nine months of the year. An adequate amount of property has been to provide protection for the water sources.

The water is disinfected with a minimum amount of chlorine. Potassium Hydroxide and Bicarbonate of Soda are added to reduce the effect of the acidic water on household plumbing. The water system is monitored daily by the water operator, John Sullivan, who is on call 24 hours per day. Additionally, one other Commissioner is a Certified Water Operator and covers the system. A new trainee is also on staff.

The elected Commissioners are Stephen Schulze, 238-5544, John Sullivan, 238-5344, and Joseph Shaw III, 413-961-9236. The monthly meeting of the Commissioner is on the third Tuesday of the month at the office of the Worthington Fire District, 480 Huntington Road. It is requested that an appointment be made to provide adequate time for discussion, if you have a need to meet with the Commissioners.

In event of an emergency or related water question, call John Sullivan first, day or night, at 238-5344 or cell at 413-575-2457. In the event, you are unable to make contact, call Joseph Shaw III at 413-961-9236 cell phone day or night or 413-238-4441, Stephen Schulze days at 238-5974 and nights and weekends at 238-5544, or his cell at 413-923-7185. If you have a question on the bill you have received, call Stephen Schulze for clarification days at 238-5974, nights and weekends at 238-5544. Please remember, that we are part time Commissioners and operators. Should you need to have the water turned on or off for repairs or for the seasonal user, please make arrangements at least a week in advance.

Water services are billed quarterly with the base amount and any overage billed in four parts during the next billing year. Meters are read annually at the end of June of each year. Please keep the meter reader area on the side of your house clear of vegetation.

#### SUBSTANCES FOUND IN TAP WATER

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:

<u>Microbial contaminants</u> -such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic contaminants</u> -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.

<u>Pesticides and herbicides</u> -which may come from a variety of sources such as agricultural, urban stormwater runoff, and residential uses.

<u>Organic chemical contaminants</u> -including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**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 that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All 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 EPA Safe Drinking Water Hotline at 800-426-4791.

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 infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial are available from the Safe Drinking Water Hotline at 800426-4791.

#### **IMPORTANT DEFINITIONS**

**Maximum Contaminant Level (MCL)** – the highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) – the level of a contaminant in drinking water below which there is no known or expected risk to health.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL)** – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**PPM-** Parts per million, or milligrams per liter. **PPB** – Parts per billion, or micrograms per liter. **pCi/L** – Picocuries per liter, (a measure of radiation absorbed by the body).

SMCL- Secondary Maximum Contaminant Level.

## WATER QUALITY TESTING RESULTS

CONTAMINANT	HIGHEST DETECT VALUE	RANGE DETECTED	MCL	VIOLATION (Y/N)	POSSIBLE SOURCE OF CONTAMINATION
Sodium (PPM)	6.67		UR	NO	Sodium Bicarbonate added for pH adjustment.
Nitrate (PPM)	0.391		10	NO	Runoff from fertilizer use; Leaching from septic tanks, sewerage; Erosion of natural deposits.
Barium (PPM)	0.0092		2.0	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nickel (PPM)	0.002		0.1	NO	Erosion of natural deposits.
Manganese (ppb) Combined Sources Pre-Treatment	0.00909 ND	0.125-0.00838	SMCL	NO	Erosion of natural deposits.
Chloroform (PPB)	4.73		70	NO	Product of disinfection combining with organic material.

Bromodichlormethane (PPB)	2.22		0.5ppb	NO	Bi-product of disinfection.
*Asbestos (PPB)	ND		6 ppb	NO	Decay of cement water mains; Erosion of natural deposits.
Iron (PPB) Combined Sources Pre-Treatment	0.0552 0.166	0.19-0.166	SMCL	NO	Naturally occurring; Corrosion of cast iron pipes.
Total Trihalomethanes (PPM)	7.94			NO	Bi-product of disinfection.
Halocacetic Acids (PPM)	5.52			NO	Bi-product of disinfection.

** Radium-226& 228 Combined (pCi/L)	1.44	5	NO	Erosion of natural deposits.
** Gross Alpha (pCi/L)	-0.02	15	NO	Erosion of natural deposits.

Sampled in 2017 \*\* Sampled in 2022\*

Volatile Organic Compounds (VOC's) and Perchlorate were samples in 2023 and no detects were found in the respective samples.

Nitrite were sampled in 2023 and no detects were found in the respective samples.

**UR - Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrences in drinking water and whether future regulations are warranted.

This system has a monitoring waiver for Synthetic Organic Compounds due to no detect found in the 2012 monitoring. Because the water has been found by the Department to be protected from these contaminants, monitoring frequency has been reduced.

Bromodichlormethane, Chloroform and Dibromochloromethane are added in the total Trihalomethanes.

PFAS tests are taken annually and we the last test was taken in February of 2023. We are happy to state that we are free of any contaminant.

CONTAMINANT	90 <sup>TH</sup> PERCENTILE	MCL	MCLG	VIOLATION (Y/N)	POSSIBLE SOURCE OF CONTAMINATION
Copper (PPM)	0.195	AL=1.3	AL=1.3	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (PPB)	0.0032	AL= 15	0	NO	Corrosion of household plumbing systems.

Lead and copper tests were taken in 2022. Since all results were below the maximum contaminant level, a waiver has been given and the next sampling period will be in 2025.

"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. Worthington Fire District 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."

# Health Effects Language for Lead and Copper

Lead: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink water over many years could develop kidney problems or high blood pressure.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

The final Source Water Assessment Program (SWAP) Report was completed in 2003. According to the report prepared by DEP, this system has a moderate source susceptibility to potential contamination of the water supply due to activities in Zone 1 and Interim Wellhead Protective Area of the water supply. This does not imply poor

water quality but characterizes the land risks due to the land use in the recharge area. Actual water quality is reflected by the results of regular water tests. A copy of this report is available from the Commissioners.

\*\*\*The annual meeting of the Worthington Fire District was held on June 28, 2023, at the Town Hall at 7:00 PM. During the course of this meeting, you were informed of the operation of the water district over the past year and you were informed of the coming upgrades and additional requirements from EPA including necessary cost adjustments.

The next meeting will be held June 26, 2024 at 7PM at the town hall.

## What are Cross Connections and What Can I do about it?

A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem.

The Worthington Fire District Water Department recommends the installation of backflow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town. For additional information on cross connections and on the status of your water systems cross connection program, please contact John Sullivan at 238-5344.

## ELIMINATING CROSS-CONNECTIONS ON YOUR PROPERTY

There are several simple devices and methods to accomplish backflow prevention and eliminate potential cross-connections that are commonly found in our homes and work places:

Atmospheric Vacuum Breakers must be installed on all threaded hose connections. These devices simply screw onto the hose bib (faucet) and provide a second threaded connection for the hose. Many local hardware stores stock these devices which can be purchased and easily installed by the property owner. Be sure the atmospheric vacuum

breaker you buy has an ASSE 1011 designation or at least an UL approval. Please contact your water department for more information.

Drain hoses and piping must be installed with an air gap between the end of the hose/piping and the discharge point. Make sure the end of the drain hose or pipe is at least 1" above the top of the sink or basin it discharges into. Residential automatic washers may have internal protection ahead of the discharge hose. Check the equipment instructions or contact your plumber.

**Handheld showers and pullout faucets**. Kitchen sink faucets with pullout spouts should have an ASSE and/or AWWA and/or UL approval for use in sinks. Similarly, handheld showers should be installed with an in-line backflow preventer with an ASSE 1014 designation.

Water faucets for sinks and tubs must be installed with an air gap between the top rim of the fixture and the faucet. Older fixtures may have faucets located below the top rim of the sink. If the faucet becomes submerged contaminated water can back-siphon into the public system if pressure is lost.

Water tanks on toilets must include a ball cock valve that creates a vacuum break to prevent backflow. Be sure the ball cock valve you buy has an ASSE 1002 designation. Hot-water heating systems must include proper backflow protection for the water line feeding the boiler. Contact a plumber or the local plumbing inspector to assure that the backflow preventer is adequate for your water heating system.

This report has been prepared to inform those who drink the water of the Worthington Fire District, as to the quality of their drinking water. If you have additional questions, please call and we will respond in a timely manner. This report has been mandated to be presented to each household on the water system by EPA and will be sent before July 1, each year. Additional copies of this report may be ordered by calling 413-238-5344.

**Notice!** Many of the service connections to your homes have been in place for 15-20 years. Several have decayed and have caused problems and expense to the home owner this past winter. There have been several questions asked by the consumer regarding who is responsible for the water line. From the main line to the curb stop on your property, the Worthington Fire District is responsible for and maintains this line. From the curb stop to the interior of your home, you are responsible for this line.

The Commissioners have agreed to supply at cost all plastic pipe and fittings to all who have their service line replaced during this summer season. Call: Deane Messeck 238-4486, Keith Manley 238-5594 or C.E. Roberts Jr and Sons 413-626-9586.

Additionally, some homes may have their electrical ground attached to the water line. Our main lines are transite and plastic pipes and do not conduct electricity very well. Several homes have had the house line deteriorate from the main line due to electrolysis. We will now charge all materials and labor for homes which do not have a ground rod installed and protect the supply line to the house from the electrolysis from the electrical, telephone or alarms grounding.

The snow removal for the hydrant in front of your home is your responsibility. We have often taken it upon ourselves to clear the snow but please be advised that it is your fire protection and your responsibility!