

# The Village of Thornville Drinking Water Report

Annual Consumer Confidence Report

March 2022

Have you ever wondered what is in your water, or if it is safe for you and your family? The Village of Thornville is now required to keep you informed about your drinking water supply. This is your annual **Consumer Confidence Report**. The Village of Thornville is pleased to be able to tell you about your Drinking Water System and important facts you should know about your drinking water. We are even more pleased, however, to let you know that your drinking water is indeed **safe** for you and your family. Should you have any further questions or concerns feel free to contact the Chief Operator, Matthew Stevens at (740)246-4863, or attend a Village Council meeting, which are held on the 4<sup>th</sup> Monday of every month at the Thornville Village Office at 7:00 P.M.

The Village of Thornville Water Department has two (2) Ohio EPA certified employees.

## About Your Water System

The Village of Thornville receives its drinking water from two drilled wells. The wells are located at 112 West Columbus Street.

The wells are located in well houses where the water is treated with a form of chlorine much like the type of chlorine bleach found in your home and polyphosphate to seal the minerals in the water. From there, the water is pumped to the water tower in the Village through the entire system. The Village water tower has a storage capacity of 400,000 gallons. The Village of Thornville pumped an average of 210,575 gallons of water per day for the year 2021.

The system supplies water to approximately 480 customers in Thornville. The Village also sells water to the Northern Perry County Water District so that they may serve areas such as Sheridan High School, Glenford Elementary School, Robinwood, Heron Bay, Thornport, and the Village of Glenford.

## Drinking Water Can Become Contaminated

The sources of drinking water (both tap water and bottled water) include rivers, streams, lakes, ponds, reservoirs, springs, and wells. As mentioned earlier, the source of Thornville's water is ground water. Ground water is water that has seeped through the ground and become trapped in sand and rock. It becomes usable to us when we drill through the rock and use a pump to bring it to the surface. 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 also 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 productions, or mining and 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 EPA 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, can 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 at 1-800-426-4791.

## **Health Advisory**

**Immuno-Compromised:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as a person with cancer undergoing chemotherapy, people 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 at 1-800-426-4791.

## **Table of Detected Contaminants (see form A)**

### **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 Thornville 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 <http://www.epa.gov/safewater/lead>.”

**Nickel Detection (unregulated contaminant):** The health advisory level for nickel is 0.1 ppm. The lifetime health advisory level is the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects over a lifetime of exposure. Nickel results 0.00408 ppm. (2/12/19 test date). Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

### **LTO Language**

“We have a current, unconditioned license to operate our water system.”

### **Source Water Information**

#### **Moderate Susceptibility PWS Based on Medium Sensitivity**

“Ohio EPA recently completed a study of the Village of Thornville's source of drinking water to identify potential contaminant sources and provides guidance on protecting the drinking water source. According to this study, the source water area that supplies water to the Village of Thornville has a medium susceptibility to contamination. This determination is based on the following:

- The depth to ground water;
- The presence of permeable material over the aquifer;

- The lack of detected contaminants in treated water; and
- The presence of few numbers of potential contaminant sources near the protection areas.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated in the future is not relatively high. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling (740-246-4863).

## Definitions

- Maximum Contaminants Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- Maximum Contaminants Level (MCL): The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible, using the best available technology.
- Parts Per Million (PPM): milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.
- Parts per Billion (PPB): micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health.
- 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.

## List of All Regulated Contaminants

the following is a list of all regulated contaminants a water system could be required to sample:

Total Coliform Bacteria	2,4,5-TP	Fecal Coliform Bacteria
Turbidity (if surface water system)	Simazine	Picloram
Beta/photon emitters	Acrylamide	Simazine
Alpha emitters	Alachlor	Additional unregulated contaminants
Combines Radium	Atrazome	Thallium
Antimony	Benzo (a) pyrene	Pentachlorophenol
Arsenic	Carbofuran	
Asbestos	Dalapon	
Hexachlorabenzene	Di(2-ethylhexyl)adipate	
Barium	Di(2-ethylhexyl)phthalate	
Beryllium	Dibromochloropropane	
Cadmium	Diquat	
Chromium	Dioxin (2,3,7,8-TCDD)	
Copper	Endothall	
Cyanide	Endrin	
Fluoride	Epichlorohydrin	
Lead	Ethylene dibromide	
Dinoseb	Glyphosate	
Mercury	Heptachlor	
Nickel	Hetachlor epoxide	
Nitrate	Hexachlorocyclopentadiene	
Nitrite	Lindane	
Selenium	Methoxychlor	
	Oxamyl	
	PCB's	

### Table of Detected Contaminants

For: Village of Thornville

<b>Disinfectants and Disinfection By-Products</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Total Trihalomethanes (TThm)*	7/12/2021	68.2	13.5 - 68.2	No goal for the total	80	ppb	N	By-product of drinking water chlorination
Total Haloacetic Acids	7/12/2021	33.9	24 - 33.9	No goal for the total	60	ppb	N	By-product of drinking water chlorination
<b>Synthetic Organics Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
N/A								Runoff from Herbicide used on row crops
<b>Inorganic Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Barium	1/26/2016	0.0103	NA	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	1/3/2013	< 0.5	NA	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	6/17/2021	0.874	NA	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Lead and Copper</b>	<b>Collection Date</b>	<b>90th Percentile</b>	<b># of Samples Over AL</b>	<b>MCLG</b>	<b>Action Level (AL)</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Copper	7/7/2021	0.262	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	7/7/2021	1.41	0	0	15	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Residual Disinfectants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Chlorine (ppm)	3/2/2021	1.44	0.48-1.44	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes