

Annual Drinking Water Quality Report for 2022
City of Hornell – PWS # NY5001215
Hornell, NY 14843
Purchase Systems:
Village of North Hornell NY5001216
Hornellsville Water District # 1 NY5030110
Hornellsville Water District # 3 NY5030111

INTRODUCTION

To comply with State regulations, the City of Hornell, annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Mr. Leonard Fucci, Chief Operator WTP, at 607-324-3469. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled City Council meetings. The meetings are held on the third Monday of every month at 7:00 pm in Council Chambers at 82 Main Street, Hornell, NY.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Hornell Public Water Supply consists of three upland reservoirs. Reservoir # 1 was constructed in 1882 to serve as the source of supply water for the City of Hornell. This reservoir was destroyed by flood and replaced with the existing reservoir in 1936. It has a capacity of 114 million gallons. Reservoir # 2 was constructed in 1910 and has a capacity of 110 million gallons. Reservoir # 3 was constructed in 1932 and has a capacity of 146 million gallons. The total capacity of the reservoir system is more than adequate to supply the demand of the users of the system. A supplemental water supply is available from two ground wells located in the Town of Hornellsville. These wells have a combined capacity of 2,000,000 gallons per day.

Our water treatment includes the following: Aeration – To remove gases and certain solids from the water by contact with air through the process of oxidation. Coagulation and Sedimentation – To settle out any solids in the water. Alum and a polymer are added to the clarifier with very vigorous mixing to help form a floc so that small particles can become large enough to settle out. Filtration – To remove any suspended solids left over from the settling process. The solids are caught up in the filter media as water passes into the clearwell. The multiwash system with air and water causes a violent collision between the sand and anthracite during the backwash process to remove the solids that are plugging up the filter media. Chlorination – Chlorine gas is a disinfectant that is used to kill off any bacteria that is left in the water after filtration. Corrosion Control – We add an ortho-phosphate to the final process in the clearwell to help prevent corrosion in the plant and in the distribution system. We add liquid potassium permanganate during the summer months to remove iron and manganese that cause discolored water.

SOURCE WATER ASSESSMENT

A Source Water Assessment Summary will be included when the data is available from the New York State Department of Health.

FACTS AND FIGURES

Our water system serves (approximately) the following number of residents: Hornell City-8,590 residents through approximately 3,500 service connections; North Hornell-688 residents through 313 service connections; Hornellsville, water district #1 –300 residents and businesses through 80 service connections; Hornellsville, water district #3 (South Hornell)- has 14 residents through 8 service connections and 2 commercial service connections. Total served: 9,592 residents through 3897 service connections.

The total amount of water produced from the plant in 2022 was 771,635,000 gallons. The daily average of water treated and pumped into the distribution system was 2,114,070 gallons per day. Our highest single producing day was on 2/10/2022 with 3,079,000 gallons. The amount of water delivered to customers from the plant was 740,598,000 gallons (final effluent) leaving an unaccounted for total of 27,030,200 gallons. This unaccounted water was due to filter washing and service water for the plant and represents approximately 3.5% of the total water produced from the plant. We also pumped a total of 78,342,270 gallons from our well system for an average of 471,941 gallons per day from the wells in 2022. Due to the fact that we pumped 78,342,270 gallons of water from the wells in the year 2022, we estimate that there is an additional 5 % loss. We estimate that the total amount of water that is unaccounted for to be 8.5%. The City of Hornell does not meter its residential water customers. Therefore, we are not able to provide an accurate account for the water lost in the system due to leaks in transmission, fire-fighting, flushing of hydrants or any other types of high usage activity. The average individual cost of water for the City of Hornell residents, the Town of Hornellsville, and the Village of North Hornell is \$360.44, \$670.44, and \$526.44 respectively.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: Total coliform, turbidity, inorganic chemicals, organic chemicals, synthetic organic chemicals, dissolved organic carbon, total organic carbon, total alkalinity, nitrate, nitrite, lead and copper, total trihalomethanes, haloacetic acids, radiologicals, PFOA/PFOS, 1,4-Dioxane. In 2022, we ran 128 samples for coliform bacteria. All bacteriological samples were negative.

The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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's Safe Drinking Water Hotline (800-426-4791) or the New York State Department of Health – Hornell District Office at 607-324-8371.

<i>Table of Detected Contaminants</i>							
Contaminant	Violation Yes / No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, AL or TT)	Likely Source of Contamination
Lead₂ <u>Hornell City</u>	No	6/10/20> 9/9/20	90% = 1.0 Range: ND- 1.8	ug/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
<u>North Hornell</u>	No	9/14/22	90% = 1.0 Range: 1.0 > 2.1				
Copper₂ <u>Hornell City</u>	No	6/10/20> 9/9/20	90%= 0.314 Range: 0.0095> 0.369	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
<u>North Hornell</u>	No	9/14/22	90% = 0.32 Range: .029 > 0.36				