

# ***Annual Drinking Water Quality Report for 2025***

***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 2025 was 803,569,000 gallons. The daily average of water treated and pumped into the distribution system was 2,201,558 gallons per day. Our highest single producing day was on 6/23/25 with 3,208,520 gallons. The amount of water delivered to customers from the plant was 785,763,000 gallons (final effluent) leaving an unaccounted for total of 17,721,000 gallons. This unaccounted water was due to filter washing and service water for the plant and represents approximately 2.2 % of the total water produced from the plant. We also pumped a total of 89,965,416 gallons from our well system for an average of 508,279 gallons per day from the wells in 2025. Due to the fact that we pumped 89,965,416 gallons of water from the wells in the year 2025, we estimate that there is an additional 11 % loss. An independent contractor will be performing a leak detection survey early this year. We estimate that the total amount of water that is unaccounted for to be 13.2 %. 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 2025, we ran 127 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
<u>Lead<sub>2</sub></u> <u>Hornell City</u>	No	8/8/23 > 9/12/23	90% < 0.400 Range: ND>2.41	ug/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
<u>North Hornell</u>	No	9/5/25 > 9/9/25	90% = 1.0 Range: <1.0 1.0				
<u>Copper<sub>2</sub></u> <u>Hornell City</u>	No	8/8/23> 9/12/23	90%= 0.124 Range: 0.152> 0.224	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	9/5/25> 9/9/25	90% = 0.277 Range: .0168 > .280				

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
Barium Surface Water Well #1 TP-002	No	2/11/25 3/8/2023	0.0373 0.105	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate Surface Water Well #1 TP-002	No	1/8/25 1/8/25	2.0 4.07	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nickel/ Surface Well # 1	No	3/9/22 3/8/23	0.0005 0.0007	mg/L	N/A		Dissolution of rocks and soil, atmospheric fallout, biological decay and from waste disposal
Turbidity	No	5/8/25	Highest Single Measure: .09	NTU	N/A	TT = < 1 NTU	Soil runoff
Turbidity	No	Monthly	Lowest monthly % of samples meeting prfm. std. of .3 NTU: 100 %	NTU	N/A	TT=95% of samples ≤ 0.3 NTU	Soil Runoff
Radium 226 Wells # 1 and # 2	No	2/19/20	0.355	pCi/L	0	5 (Combined with 228)	Erosion of natural deposits.
Radium 228 Wells # 1 and # 2	No	2/19/20	0.409	pCi/L	0	5 (Combined with 226)	Erosion of natural deposits.
Surface Plant EP Radium 226 Radium 228	No	4/12/23 4/12/23	0.423 0.0423				
Plant Finish EP Carbon – Total Organic	No	Monthly	Avg: 3.18 Range: 2.05 > 5.96	mg/L	TT	N/A	Naturally present in the environment
Carbon – Dissolved Organic (January > December)	No	Monthly	Avg: 2.6 Range: 1.91 > 4.28	mg/L	TT	N/A	
Alkalinity (Raw water)	No	Monthly	Avg : 98 Range: 70 > 134	mg/L	TT	N/A	
Chlorine Hornell City Surface	No	continuous monitoring 6 per day	Average: 2.16 Range: 1.97 > 2.4	mg/L	4.0	4.0	Added as Disinfectant
Wells 1 & 2	No	Daily	Average: 1.0 Range: .8 > 1.3	mg/L	4.0	4.0	
Chlorine North Hornell	No	Monthly	Avg- 1.36 Range: .62 > 1.84	mg/L	4.0	4.0	Added as Disinfectant



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
PFOA Well #2 EP	No	Quarterly 2023	Avg = 4.2 Range 3.02 > 4.8	ng/l	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
PFOS Well #2 EP	No	Quarterly 2023	Avg = 4.8 Range 3.3 > .5.6	ng/l	N/A	10	Same as above
PFHxA Well #2 EP	No	Quarterly 2023	Avg = 1.9 Range ND > 1.9	ng/l	N/A	10	Same as above
PFBS Well #2 EP	No	Quarterly 2023	Avg = 0.74 Range ND > .74	ng/l	N/A	10	Same as above
PFHpA Well #2 EP	No	Quarterly 2023	Avg = 1.1 Range ND > 1.1	ng/l	N/A	10	Same as above
PFHxS Well #2 EP	No	Quarterly 2023	Avg = .95 Range ND > 0.95	ng/l	N/A	10	Same as above
PFNA Well #2 EP	No	Quarterly 2023	Avg = 1.2 Range ND > 1.2	ng/l	N/A	10	Same as above
PFPeA Well #2 EP	No	Quarterly 2023	Avg = 1.9 Range 1.7 > 2.09	ng/l	N/A	10	Same as above
HFP0-DA	No	Quarterly 2023	Avg = 2.62 Range = ND > 2.62	ng/l	NA	NA	Same as Above
PFBA Well #2 EP	No	Quarterly 2025	Avg = 2.44 Range ND > 2.95	ng/l	N/A	10	Same as above
PFOA Well #2 Raw	No	2/16/2022	6.6	ng/l	N/A	10	Released into the environment from widespread use in commercial and industrial use.
PFOS Well #2 RAW	No	2/16/2022	4.7	ng/l	N/A	10	Same as above
PFHxA Well #2 Raw	No	2/16/2022	4.4	ng/l	N/A	N/A	Same as above
PFBS Well #2 Raw	No	2/16/2022	1.4	ng/l	N/A	N/A	Same as above
PFHpA Well #2 Raw	No	2/16/2022	2.8	ng/l	N/A	N/A	Same as above
PFHxS Well #2 Raw	No	2/16/2022	1.3	ng/l	N/A	N/A	Same as above
PFNA Well #2 Raw	No	2/16/2022	1.1	ng/l	N/A	N/A	Same as above
PFPeA Well #2 Raw	No	2/16/2022	5.6	ng/l	N/A	N/A	Same as above

PFBA Well # 2 Raw	No	2/16/2022	3.3	ng/l	N/A	N/A	Same as above
<b>Contaminant</b>	<b>Violation Yes / No</b>	<b>Date of Sample</b>	<b>Level Detected (Avg/Max) (Range)</b>	<b>Unit of Measure</b>	<b>MCLG</b>	<b>Regulatory Limit (MCL, AL or TT)</b>	<b>Likely Source of Contamination</b>
PFHxA Well # 2 101B Lag	No	4/20/2022	.57	ng/l	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
PFPeA Well # 2 101B Lag	No	4/20/2022	1.7	ng/l	N/A	N/A	Same as above
PFBA Well # 2 101B Lag	No	4/20/2022	2.5	ng/l	N/A	N/A	Same as above
HFPO-DA(gen x) Well # 2 101B Lag	No	4/20/2022	1.4	ng/l	N/A	N/A	Same as above
PFPeA Well # 2 102B Lag	No	4/20/2022	1.4	ng/l	N/A	N/A	Same as above
PFBA Well # 2 102B Lag	No	4/20/2022	2.6	ng/l	N/A	N/A	Same as above
HFPO-DA(gen x) Well #2 102B Lag	No	4/20/2022	1.6	ng/l	N/A	N/A	Same as above
PFOS 6:2 FTS Well # 2 102B Lag	No	4/20/2022	7.3	ng/l	N/A	N/A	Same as above

\*Trichloroethene – Health Effects: Some people who drink water containing trichloroethene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (.12 NTU) for the year occurred on 1/30/2024. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. We met this level 100% every month.

2 – The level presented is the 90th percentile of the 21 sites tested. A percentile is a value on a scale of 100 that indicates the percent measurements that is equal to or below it. This means in our system copper levels in 21 sites are below the 90th percentile value and 0 sites are above the 90th percentile. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented is the 90th percentile of the 21 sites tested. A percentile is a value on a scale of 100 that indicates the percent measurements that is equal to or below it. This means in our system lead levels in 21 sites are below the 90th percentile value and 0 sites are above the 90th percentile. The action level for lead was not exceeded at any of the sites tested.

## Definitions:

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

**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 a 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 contamination.

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

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

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Milligrams per liter (mg/L):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/L):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**Nanograms per liter (ng/L):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**Picograms per liter (pg/L):** Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**Millirems per year (mrem/yr):** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

### **What Does This Information Mean**

Last year, we conducted tests for over 80 contaminants. The detected levels of trichloroethene from the wells were below the MCL of 5ug/l for all of the 2023 biannual sample results. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of if our drinking water meets health standards.

### **General Information On Lead In Drinking Water**

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Hornell is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the City of Hornell at 607-324-3469. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

### **Information On Lead Service Line Inventory**

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by visiting the City of Hornell Clerk at City Hall located at 82 Main Street, Hornell, N.Y.

**IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?** Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-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 from their health care provider about their drinking water. EPA/CDC

guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

## **INFORMATION ON UNREGULATED CONTAMINANTS**

The United States Government of Interior completed a geological survey sampling of the City's wells in November, 2008. If you wish to review these results, please contact Mr. Leonard Fucci, Chief Operator WTP, at 607-324-3469, USGS in Ithaca, NY at 607-266-0217 or the NYS Department of Health at 607-324-8371.

## **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

## **TRANSMISSION SYSTEM IMPROVEMENTS FOR 2025**

- 1) 16 leaks were repaired .
- 2) 4 new fire hydrants were installed .
- 3) 5 new service lines were installed.

## **WATER TREATMENT PLANT IMPROVEMENTS FOR 2025**

- 1) Purchased and installed a HACH Surface Scatter sc7 for raw water turbidity monitoring.
- 2) We added 90 cubic ft. of anthracite to filter number 3, and 38 cubic ft. in filter number 2.
- 3) Rebuilt the Chlorine gas chlorine injectors at the plant.
- 4) Routine maintenance on all chemical feed pumps.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all of our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.