***Annual Drinking Water Quality Report for 2024***
***D.C.W.W.A. Staatsburgh Water Service Area***
***Staatsburgh, New York 12580***
***Public Water Supply ID# 1302777***

## INTRODUCTION

To comply with Federal and State regulations, the DCWWA-Staatsburgh System 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 the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards except for Trihalomethanes. This report provides an overview of last year's water quality. 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 the Hyde Park Water Plant at 845-229-2524 and ask for Alain Petit, Jr.. We want you to be informed about your drinking water. If you want to learn more about the Dutchess County Water and Wastewater Authority, please visit our website at WWW.DCWWA.Org. You can also reach us at (845)486-3601.

## 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 Staatsburgh System is fed through the Hyde Park System. Our water source is the Hudson River. The Hyde Park facility is a conventional filtration plant that consists of a raw water pumping station, and the main treatment plant. The raw water station pumps water from the Hudson River to the treatment facility approximately one half mile away. At the main treatment facility water received is treated by chemical coagulation, sedimentation, and filtration for the removal of particulate matter and large microorganisms. Disinfection with chlorine is provided to eliminate pathogens. Sodium Hypochlorite is added to the Raw intake for zebra mussel control. Copper sulfate is added in the treatment process for taste and odor control. Tri-polyphosphate is added to the treated water for corrosion control in the distribution system. In the process of turning raw water into a finished product, the water quality is consistently monitored at each step along the way. Raw and finished water characteristics are checked daily for temperature, turbidity, total dissolved solids, and pH. Treatment is optimized based on these results, and other process control sampling results made along the treatment path. Finished water is checked for chlorine residual and turbidity by continuous monitoring equipment, and verified by grab sampling. The finished water is then pumped out into the distribution system for customer use. The distribution system water is monitored for coliform bacteria, chlorine residual, turbidity, and other regulated parameters. Two elevated storage tanks located in the

Hyde Park distribution system float on the system, storing water for peak flow periods and fire protection. A chlorine booster station on Rt. 9 at the entry point for the Staatsburgh distribution system is used to keep chlorine residuals within regulated parameters. 3 pressure reducing stations at Hughes Avenue, Old Post Road, and Mulford Avenue help keep system pressure from exceeding acceptable limits. A blow-off station at the end of Hillcrest Terrace also helps to relieve pressure, and prevent water hammer from occurring.

During 2024, our system did not experience any restriction of our water source. There were no spills in the Hudson River that placed the Hudson River as our source in jeopardy of meeting our demands. The local health department is in contact with plant operators whenever there is a spill event of any size or type in the Hudson River so we are not caught by any surprise events that could jeopardize water treatment.

## FACTS AND FIGURES

Our water system serves approximately 1,164 persons thru 455 service connections. The total amount of water received in 2024 was 43,040,000 gallons. The daily average of water treated and pumped into the distribution system was 117,918 gallons per day. Our highest single day was 200,000 gallons in August of 2024. For information regarding the amount of water delivered to customers please call our billing department at 845-486-3601. In 2024 there were 7 water main breaks, and 4 water service line leaks repaired by the Authority and/or customers. In 2024, water customers were charged $8.49 per 1,000 gallons of water with a monthly service charge of $23.00 per month for a residential service connection.

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants which may have gotten into our water source. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. If you wish to have a copy of all test results for all non-detected contaminates please contact the DCWWA, and we will be happy to provide them to you. Please note water from the Hyde Park Plant is not fluoridated. 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, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 (1-800-426-4791), or the Dutchess County Department of Health at 845-486-3404.

**A Summary of the Regulated Contaminants**
**Detected in Our Treated Water**

## Microbiological Contaminants

| Contaminants | Violation Yes/No | Date Of Sample | Level Detected (Avg/Max) (Range) | Unit Measure-ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Turbidity ( 1 ) | No | 5/13/24 | ( Max ) 0.24 | NTU | N/A | 0.30 | Soil Runoff |
| Turbidity ( 2 ) | No | Every 4 Hours | 100% ≤ 0.3 | NTU | N/A | TT = 95% of samples ≤ 0.3 NTU | |
| Distribution Turbidity ( 3 ) | No | 8/2024 | ( Max Avg. ) 0.24 | NTU | N/A | MCL > 5 NTU | |
| Entry Point Total Organic Carbon | No | 1/mo | ( Avg. ) 2.9 ( Range ) 1.4 – 4.4 | mg/L | N/A | TT | Naturally present in the environment |

## Organic Contaminants

| Contaminants | Violation Yes/No | Date Of Sample | Level Detected (Avg/Max) (Range) | Unit Measure-ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| 2, 4-D | No | 12/18/20 | ( Max ) 0.00015 | mg/L | 0.05 | 0.05 | Runoff from herbicide used on row crops |
| Chloromethane | No | 12/03/24 | ( Max ) 0.49 | ug/L | N/A | 5 | Emissions from chemical production; inadvertent formation during chlorination; Leaching from land fills |
| Chloroethane | No | 12/03/24 | ( Max ) 0.36 | ug/L | N/A | 5 | Used in organic chemistry, as a refrigerant, food additive, and in drug manufacturing |

## Inorganic Contaminants

| Contaminants | Violation Yes/No | Date Of Sample | Level Detected (Avg/Max) (Range) | Unit Measure-ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Barium | No | 12/03/24 | ( Max ) 0.019 | mg/L | 2 | 2 | Erosion of natural deposits; Discharge of drilling wastes; Discharge of metal refineries |
| Chloride | No | 10/21/20 | ( Max ) 49.9 | mg/L | N/A | 250 | Naturally occurring or indicative of road salt contamination |
| Copper ( 4 ) | No | 7/19/22 - 9/15/22 | 0.400 ( Range ) <0.01 – 0.91 | mg/L | N/A | AL = 1.3 | Erosion of natural deposits; Corrosion of household plumbing systems; Leaching from wood preservatives |
| Fluoride | No | 12/03/24 | ( Max ) 0.05 | mg/L | N/A | 2.2 | Erosion of natural deposits; Water additive promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Lead ( 5 ) | No | 7/19/22 - 9/15/22 | 1.1 ( Range ) <1 – 1.3 | ug/L | 0 | AL = 15 | Erosion of natural deposits; Corrosion of household plumbing systems |
| Nitrate | No | 4/02/24 | ( Max ) 0.43 | mg/L | 10 | 10 | Erosion of natural deposits; Run off from fertilizer use; Leaching from septic tanks; Sewage |
| Sodium ( 6 ) | No | 10/21/20 | ( Max) 28 | mg/L | N/A | *No MCL. See foot note 6 for health effects | Naturally occurring; road salt; Water softeners; Animal waste |

## Synthetic Organic Contaminants

| Contaminants | Violation Yes/No | Date of Sample | Level Detected (Avg./Max) (Range) | Unit Measure -ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Perfluorooctanoic Acid ( PFOA ) | No | Qrtrly | ( Avg. ) 3 ( Range ) ND – 3.37 | ng/L | N/A | 10 | Released in to the environment from widespread use in commercial and industrial applications |
| Perfluorooctane Sulfonic Acid ( PFOS ) | No | Qrtrly | ( Avg. ) 1 ( Range ) ND - 1.77 | ng/L | N/A | 10 | Released in to the environment from widespread use in commercial and industrial applications |
| Perfluorohexanoic Acid ( PFHxA ) | No | Qrtrly | ( Avg. ) 1 ( Range ) ND -1.02 | ng/L | N/A | 50,000 | Released in to the environment from widespread use in commercial and industrial applications |
| Perfluoroheptanoic Acid ( PFHpA ) | No | Qrtrly | ( Avg. ) 0.335 ( Range ) ND –0.670 | ng/L | N/A | 50,000 | Released in to the environment from widespread use in commercial and industrial applications |

## Radioactive Contaminants

| Contaminants | Violation Yes/No | Date of Sample | Level Detected (Avg./Max) (Range) | Unit Measure -ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Gross Alpha | No | 12/19/23 | ( Max ) 0.514 | pCi/L | 0 | 15 | Erosion of natural deposits |
| Gross Beta ( 7 ) | No | 12/19/23 | ( Max ) 1.18 | pCi/L | 0 | 50 | Decay of natural deposits and man-made emissions |
| Combined 226 and 228 Radium | No | 12/19/23 | ( Max ) 0.598 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Uranium | No | 12/19/23 | Max ) 0.031 | ug/L | 0 | 30 | Erosion of natural deposits |

# Disinfection Byproducts

| Contaminants | Violation Yes/ No | Date of Sample | Level Detected (Avg./Max) (Range) | Unit Measure -ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Haloacetic Acids ( HAA5 ) ( 8 ) | No | Qrtrly | ( Avg. ) 37.0 ( Range ) 1.3 – 44.8 | ug/L | N/A | 60 | By-product of drinking water disinfection needed to kill harmful organisms |
| Total Trihalomethanes ( TTHMs ) ( 8 ) | Yes | Qrtrly | ( Avg. ) 87.0 ( Range ) 26.7 – 160 | ug/L | N/A | 80 | By-product of drinking water disinfection needed to kill harmful organisms TTHMs are formed when source water contains large amounts of organic matter |

| **Total Trihalomethanes Locational Running Annual Average ( LRAA ) ( TTHMs ) ( 8 )** | **Site 1** | **Site 2** |
|---|---|---|
| **1st Quarter ( January – March )** | 60 | 55 |
| **2nd Quarter ( April – June )** | 69 | 64 |
| **3rd Quarter ( July – September )** | 87 | 67 |
| **4th Quarter ( October–December )** | 85 | 63 |

# Disinfection

| Contaminant | Violation Yes/ No | Date of Sample | Level Detected (Avg./Max) ( Range ) | Unit Measure-ment | MCLG MRDLG | Regulatory Limit MCL,TT,AL, MRDL | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Entry Point Chlorine Residual ( 9 ) & ( 10 ) | No | Cont. | ( Avg. ) 1.34 ( Range ) 0.51 – 2.16 | mg/L | N/A | 4.0 | Water additive used to control microbes |

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 combined filter effluent turbidity measurement of the year occurred on 5/13/24, and was 0.24 NTU.

2 - 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. 100% of our measurements for the year were below this level. We monitor turbidity continually, and record the readings every four hours.

3 - Distribution Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest monthly average Distribution Turbidity measurements detected during the year, 0.24 NTU, occurred in August 2024. The value is below the State's maximum contaminant level, 5 NTU .

4 – The level presented represents the 90$^{th}$ percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to, or below it. The 90$^{th}$ percentile is equal to, or greater than, 90% of the copper values detected at your water system. In this case, 10 samples were collected from 10 different sites at your water system. The 90$^{th}$ percentile value was 0.400 mg/l, which is below the Action Level of 1.3 mg/l.

5 –The level presented represents the 90$^{th}$ percentile of the 10 sites that were tested. A percentile is a value on a scale of 100 that indicates the percent distribution that is equal to, or below it. The 90$^{th}$ percentile is equal to, or greater than, 90% of the lead values detected at your water system. In this case, 10 samples were collected from 10 different sites at your water system. The 90$^{th}$ percentile was 1.1 ug/l, which is below the Action Level of 15 ug/l.

6 – Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.

7 – The State considers 50 pCi/L to be the level of concern for Beta particles.

8 - This level represents the annual quarterly average, and range, calculated from data collected.
The Locational Running Annual Averages for Trihalomethanes were exceeded in the 3$^{rd}$, and 4$^{th}$ quarters of 2024 at Site 1. A water advisory has remained in place that was issued in 2024. Some studies suggest that people who drank water containing trihalomethanes for long periods of time (e.g., 20 to 30 years) have an increased risk of certain health effects. These include an increased risk for cancer and for low birth weights, miscarriages and birth defects. The methods used by these studies could not rule out the role of other factors that could have resulted in the observed increased risks. In addition, other similar studies do not show an increased risk for these health effects. Therefore, the evidence from these studies is not strong enough to conclude that trihalomethanes were a major factor contributing to the observed increased risks for these health effects. Studies of laboratory animals show that some trihalomethanes can cause cancer and adverse reproductive and developmental effects, but at exposures much higher than exposures that could result through normal use of the water. The United States Environmental Protection Agency reviewed the information from the human and animal studies and concluded that while there is no causal link between disinfection byproducts (including trihalomethanes) and human effects, the balance of the information warranted stronger regulations that limit the amount of trihalomethanes in drinking water, while still allowing for adequate disinfection. The risks for adverse health effects from trihalomethanes in drinking water are small compared to the risks for illness from drinking water inadequately disinfected water.

9 -The value reported represents the Maximum Residual Disinfectant Level (MRDL), which is a level of disinfectant added for water treatment that may not be exceeded at the consumers tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated, but in the future they will be enforceable in the same manner as MCLs.

10 - Chlorine residuals are monitored continuously on water treatment plant effluent.

**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.
***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 in one trillion parts of liquid (parts per trillion – ppt).

## WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, the Locational Running Annual Averages for TTHMs at Site 1 were above the MCL for the 3rd, and 4th quarters of 2024. The LRAA for TTHMs is trending towards falling below the MCL by the 1st, or 2nd quarter of 2025. Routine flushing is an acceptable method to prohibit the formation of TTHMs in the distribution system, and is a good way to help keep their levels low. We begin annual routine flushing May – October, and have reviewed our flushing program to make adjustments where needed to maximize effectiveness. Please see Foot Note 8 under the above Tables for information on the adverse health affects of TTHMs.

## WE ARE REQUIRED TO PRESENT THE FOLLOWING 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. DCWWA is responsible for providing high quality drinking water, and removing lead pipes that we own, 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 DCWWA at 845-486-3601. 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*.

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2024, our system was in compliance with all applicable State drinking water operating, monitoring, and reporting requirements.

## 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.

## DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 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 (1-800-426-4791).

## 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.

### System Improvements

A preliminary capital plan for the replacement, and rehabilitation, of some of the aging water main in the system was begun in 2011, and continued to be updated in 2024. Our capital plan has also been updated to include carious projects to replace aging equipment at the water treatment plant on South Drive.

## CLOSING

In closing, the Board members and staff of the Dutchess County Water and Wastewater Authority wish to 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 and preserve our water sources, which are the heart of our community, and our way of life. Please call our office if you have any questions.