

Annual Drinking Water Quality Report for 2021
Pace University - Pleasantville, New York 10570
(Public Water Supply ID# 5907678)

INTRODUCTION

To comply with State regulations, Pace University will be annually issuing 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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 Pace University Facilities Management Office at (914) 923-2840. We want you to be informed about your drinking water. To obtain additional information on the drinking water provided to Pace University, you may contact the Mount Pleasant Water District directly, at 119 Lozza Drive, Valhalla, New York 10595-1268, or by telephone at (914) 742-2313. The source water assessment report and the Annual Drinking Water Quality Reports for 2021 prepared by the Mount Pleasant Water District and the New Castle Consolidated Water District are also available at the Pace University campus library. In addition, you can visit www.mynewcastle.org for a copy of the New Castle/Stanwood Consolidated Water System report.

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 Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is purchased from the Town of Mount Pleasant which purchases its water from the Town of New Castle Water District, New Castle's primary source is the Catskill Aqueduct System and its secondary source is the Croton Aqueduct System. During 2021, our system did not experience any restriction of our water source. The water is treated through a five-stage process that typically removes 98.14% of particulate matter. Anything left behind is disinfected through the ozonation process prior to distribution.

FACTS AND FIGURES

Our water system serves 2,753 consumers with 34 service connections at the Pace University Pleasantville, New York campus. The total water withdrawn by the New Castle Water District in 2021 was 915.119 million gallons (MG) of raw water from the Catskill Aqueduct System and 229.219 MG from the Croton Aqueduct system. 327.744 MG were supplied to the Village of Pleasantville, from where Pace University purchases its water. The total amount of water that was delivered to Pace University from Pleasantville in 2021 was 21.299 million gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. Pace University is required to monitor for total coliform, lead, copper, total trihalomethanes, haloacetic acids and turbidity. Additional contaminants are monitored in the New Castle Water District, including microbiological contaminants, inorganic compounds, volatile organic compounds, radiological compounds, and synthetic organic compounds. 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 Westchester County Health Department at (914) 813-5000.

Table of Detected Contaminants							
Contaminant	Violation? Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Inorganic Contaminants							
Alkalinity	No	6/5/2021	12.0	mg/l	N/A	N/A	Erosion of deposits.
Barium	No	2021	0.0324 (0.0070-0.0324)	mg/l	2	2	Erosion of deposits.
Calcium	No	12/2/2021	23.1	mg/l	N/A	N/A	Erosion of deposits.
Chloride	No	2021	82.5 (11.7-82.5)	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Corrosivity by Calculation	No	2019	-2.19	mg/l	N/A	N/A	Erosion of deposits.
Fluoride	No	2021	0.69 ¹ (0.33-0.85)	mg/l	N/A	2.2	Erosion of deposits; water additive that promotes strong teeth.
Hardness ²	No	6/5/2021	15.0	mg/L	N/A	N/A	Naturally occurring.
Magnesium	No	2021	7.71 (0.928-7.71)	mg/l	N/A	N/A	Naturally occurring.
Nickel	No	2021	0.85 (<0.5-0.85)	ug/l	N/A	N/A	Naturally occurring.
Nitrate	No	2021	0.353 (<0.05-0.353)	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage. Erosion of deposits.
pH	No	6/2021	7.48 (7.0-7.48)	units	N/A	N/A	N/A.
Sodium	No	2021	44.7 (7.91-44.7)	mg/l	N/A	See health effect ³	Naturally occurring; Road salt; Animal waste.
Sulfate	No	2021	9.46 (<5.0-9.46)	mg/l	N/A	250	Naturally occurring.
Total Dissolved Solids	No	2019	62.8	mg/l	N/A	N/A	Erosion of deposits.
Zinc	No	2021	0.020 (<0.020- 0.020)	mg/l	N/A	5	Naturally occurring; Mining waste.
Radioactive Contaminants							
Gross Alpha (Including radium- 226 but excluding radon and uranium)	No	4/24/2018	0.464	pCi/L	0	15	Erosion of natural deposits.
Beta particles and photon activity from man-made radionuclides	No	4/24/2018	0.923	pCi/L	0	50 ⁴	Decay of natural deposits and man-made emissions.
Combined radium-226 and 228	No	4/24/2018	1.086	pCi/L	0	5	Erosion of natural deposits.
Uranium	No	4/24/2018	0.125	ug/L	0	30	Erosion of natural deposits.
Disinfection Byproducts ⁵							
Total Haloacetic Acids	No	2021	15.17 ⁶ (9.84 -20.61) ⁷	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms. ⁸
Total Trihalomethanes	No	2021	30.56 ⁶ (13.83 - 48.44) ⁷	ug/L	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter. ⁸

Table of Detected Contaminants

Contaminant	Violation? Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Disinfectants							
Chlorine Residual	No	2021	1.3 ⁹ (0.7-1.8)	mg/L	N/A	4 ¹⁰	Water additive used to control microbes.
Microbiological Contaminants							
Distribution Turbidity ¹¹	No	2021	0.17 (267 Samples: 0.1 - 0.3)	NTU	N/A	>5	Soil runoff.
Synthetic Organic Contaminants ¹²							
Perfluorooctanoic Acid (PFOA)	No	2021	4.02 ¹³ (ND - 4.02)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications
Perfluorooctanesulfonic Acid (PFOS)	No	2021	2.76 ¹³ (ND - 2.76)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications

Table of Unregulated Detected Contaminants

Contaminant	Violation? Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Synthetic Organic Contaminants ¹²							
Perfluorobutanesulfuric acid - (PFBS)	No	2021	2.83 ¹³ (ND - 2.83)	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexanesulfonic acid- (PFHxA)	No	2021	2.54 ¹³ (ND -2.54)	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluoroheptanoic acid (PFHpA)	No	2021	2.1 ¹³ (ND - 2.1)	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexanesulfonic acid- (PFHxS)	No	2021	1.09 ¹³ (ND -1.09)	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluorononanoic acid- (PFNA)	No	2021	0.652 ¹³ (ND - 0.652)	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Dicamba	No	9/20/2021	0.093 (Catskill)	ug/L	N/A	N/A	Runoff from herbicide use.

Notes:

- This level represents the highest detected fluoride level and range of values detected in 2021.
- Soft water: 0-45 mg/L. Soft to moderately hard water: 46-90 mg/L. Moderately hard to hard water: 91-130 mg/L.
- Water containing >20mg/L of sodium should not be used for drinking by people on severely restricted sodium diet. Water containing >270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diet.
- The State considers 50 pCi/L to be the level of concern for Beta particles.
- Disinfection byproducts data is collected from two different sampling points from 1st quarter 2021 to 4th quarter 2021.
- The level represents the highest value of locational running annual average calculated from the data collected.
- Range represents the minimum and maximum values out of all TTHMs and HAA5s collected throughout the year.
- Additional source of these TTHMs and Haloacetic acids is from the chlorination of water provided by the Mount Pleasant Water District. (TTHMs include chloroform, bromodichloromethane, dibromochloromethane, and bromoform; Haloacetic acids include mono-, di-, and tri-chloroacetic acid, and mono- and di-bromoacetic acid).
- Value presented is the maximum quarterly average for 2021.
- Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.
- Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (0.3 NTU) occurred in August and September 2021. This value is below the State's maximum contamination level (5 NTU).

12. PFOA and PFOS are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). PFAS are manmade chemicals that have been widely used in various consumer, commercial, and industrial products since the 1950s. These chemicals' unique properties make them resistant to heat, oil, stains, grease, and water and useful in a wide variety of everyday products. One of the PFAS' was widely used in fire-fighting foam. On August 26, 2020, New York State adopted new drinking water standards for public water systems that set maximum contaminant levels (MCLs) of 10 parts per trillion (10 ppt) each for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and 1 part per billion (1 ppb) for 1,4-dioxane.

PFOA and PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA and PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA and PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA and PFOS in animals.

13. The levels presented in the table represents the highest detected PFAS level, and the range of values in 2021.

Lead and Copper

Contaminant	Violation (Yes/No)	Date of Sample	Level Detected (90th% value range)	Unit Measurement	Regulatory Limit (AL)	MCLG	# of samples collected	# of samples exceeds AL Range	Likely Source of contamination
Lead ¹	No	2021	ND	ug/L	15	0	10	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper ²	No	2021	0.011 (0.001 -0.011)	mg/L	1.3	1.3	10	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Notes:

- The level presented represents the 90th 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 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 10 samples were collected at your water system and the 90th percentile value was the ninth highest value. The action level for lead was not exceeded at any of the sites tested in 2021.
- The level presented represents the 90th percentile of the 10 samples collected. The action level for copper was not exceeded for the 10 sites tested in 2021.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. Pace University Water System 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead was not exceeded in any of the 10 samples collected. We are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Pace University water system 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2021, our system was in compliance with applicable State drinking water operating, and reporting requirements.

INFORMATION ON CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium and Giardia are microbial pathogens found in surface water and groundwater under the influence of surface water. During 2021, we were not required to monitor for these organisms. However, our supplier (NYCDEP) found very low, sporadic levels of Crypto and Giardia. Therefore, the testing indicates a possible small presence of these organisms in our raw, untreated water. Furthermore, our water passes through processes at the Millwood Water Treatment Plant and is very aggressively treated. (See the aforementioned description of these steps found in the section entitled **Where does our water come from?**). Cryptosporidium and Giardia must be ingested to cause disease, and it may spread through other means other than drinking water. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand-washing practices are poor.

Ozone is one of the most effective disinfectants for Cryptosporidium and Giardia, and New Castle water is both ozonated and filtered to minimize any health risk from these organisms. For additional information on Cryptosporidiosis or Giardiasis, please call the Westchester County Department of Health at (914) 813-5000 or write the Westchester County Department of Health, 25 Moore Avenue, Mount Kisco, New York 10549.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water quality 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. 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 (800-426-4791).

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, New Castle Water System, Pace University's water supplier, monitors fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/L. During 2021, monitoring showed fluoride levels in your water were within 0.1 mg/L of the target level 99.22 % of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

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 firefighting 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.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

This report was compiled and prepared by your water system operator:

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