Annual Drinking Water Quality Report for 2018 Pace University, New York 10570 WCDH Facility #00059 (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.

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 system serves 2,753 consumers with 29 service connections at the Pace University Pleasantville, New York campus. 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.

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 Report for 2018 prepared by the Mount Pleasant Water District, are also available at the Pace University campus library. For more information, please contact the Pace University Facilities Management Office at (914)-923-2840.

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 compounds, lead and copper, volatile organic compounds, radiological compounds, total trihalomethanes, and haloacetic acids. 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 Dete	cted Contami	inants			
Contaminant	Violation? Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement ^a	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination	
Inorganic Contamina	ants							
Alkalinity	No	2018	14.7 ^b	mg/l	n/a	N/A	Erosion of deposits.	
Barium	No	2018	0.0092 ^b	mg/l	2.0	2.0	Erosion of deposits.	
Calcium	No	2018	5580 ^b	ug/l	n/a	N/A	Erosion of deposits.	
Chloride	No	2018	24.5 ^b	mg/l	n/a	250	Naturally occurring or indicative of road salt contamination.	
Corrosivity by Calculation	No	2018	-2.02 ^b	mg/l	n/a	N/A	Erosion of deposits.	
Fluoride	No	2018	0.70(0.46-0.93) ^b	mg/l	n/a	2.2	Erosion of deposits; water additive that promotes strong teeth.	
Calcium Carbonate	No	2018	14 ^b	mg/l	n/a	NA	Erosion of deposits.	
Magnesium	No	2018	1000 ^b	ug/l	n/a	N/A	Erosion of deposits.	
Sodium	No	2018	11.1 ^b	mg/l	n/a	See health effect ^c	Naturally occurring; Road salt; Animal waste	
Sulfate	No	2018	3.65 ^b	mg/l	n/a	250	Naturally occurring.	
Total Dissolved Solids	No	2018	71.2 ^b	mg/l	n/a	N/A	Erosion of deposits.	
Nitrate	No	2018	0.090 ^b	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage. Erosion of deposits.	
Nickel	No	2018	0.38	ug/l	n/a	n/a	Naturally occurring.	
Zinc	No	2018	0.0034	mg/L	n/a	5	Naturally occurring.	
Radioactive Contami	inants ^d	I			· L		I.	
Gross Alpha (Including radium- 226 but excluding radon and uranium)	No	2013	0.43 (+/- 0.32)	pCi/L	n/a	15	Erosion of natural deposits.	
Beta particles and photon activity from man-made radionuclides	No	2013	0.16 (+/- 0.44)	pCi/L	n/a	50°	Decay of natural deposits and man- made emissions.	
Combined radium- 226 and 228	No	2013	0.015(+/- 0.39)	pCi/L	n/a	5	Erosion of natural deposits.	

Disinfection Byprod	ucts- Stage 2f							
Total Haloacetic Acids	No	2018	10.61 ^g (6.07-17.64) ^h	ug/L	NA	60	By-product of drinking water disinfection needed to kill harmful organisms. ^h	
Total Trihalomethanes	No	2018	25.083 (11.063-40.689) ^h	ug/L	NA	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter. ¹	
Disinfectants								
Chlorine Residual No 2018		2018	0.9 ^j (0.4-1.5)	mg/L	NA	4 ^k	Water additive used to control microbes.	
Microbiological Con	taminants	I			ı		L	
Distribution Turbidity ^l	No	2018	0.50 (268 Samples: 0.14-0.5)	NTU	NA	>5	Soil Runoff	

Notes:

- a. See definitions below.
- b. Result obtained from Town of New Castle and it does not include a range except for Flouride.
- c. 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.
- d. Samples are collected for Radioactive Contaminants every 9 years.
- e. The State considers 50pci/L to be the level of concern for Beta particles.
- f. Stage 2 data are collected from two different sampling points from 1st quarter 2018 to 4th quarter 2018
- g. The level represents the highest value of locational running annual average calculated from the data collected.
- h. Range represents the minimum and maximum values out of all TTHMs and HAA5s collected throughout the year.
- i. 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).
- j. Value presented is the maximum quarterly average for 2018.
- k. 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 (0.50 NTU) occurred in September 2018. This value is below the State's maximum
 contamination level (5 NTU)

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 ^a	No	2018	ND	ug/L	15	0	10	0	Corrosion of household plumbing systems; Erosion of natural deposits

Copper ^b	No	2018	0.038	mg/L	1.3	1.3	10	0	Corrosion of
			(0.003 -						household
			0.06)						plumbing
									systems;
									Erosion of
									natural
									deposits.
									_

Notes:

a. 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 fourth highest value The action level for lead was not exceeded at any of the sites tested in 2018.

b. 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 2018.

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.

Definitions:

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

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

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

<u>Treatment Technique (TT)</u>: 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.

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

<u>Milligrams per liter (mg/l)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

<u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

<u>Nanograms per liter (ng/l)</u>: Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

<u>Picograms per liter (pg/l)</u>: 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.

<u>Million Fibers per Liter (MFL)</u>: 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 2018, 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 2018, 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 handwashing 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, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/L. During 2018, monitoring showed fluoride levels in your water were within 0.1 mg/L of the target level 98.9 % 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 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.

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.