



ANNUAL DRINKING WATER QUALITY REPORT FOR 2020

PORT WASHINGTON WATER DISTRICT
38 SANDY HOLLOW ROAD, PORT WASHINGTON, NY 11050
(PUBLIC WATER SUPPLY ID # 2912267)

PREPARED BY: D&B ENGINEERS AND ARCHITECTS
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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.

INTRODUCTION

To comply with State regulations, Port Washington Water District 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. 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 Italo J. Vacchio, Superintendent of the Port Washington Water District, at (516) 767-0171, the EPA Safe Drinking Water Hotline (1-800-426-4791), or the Nassau County Department of Health (NCDOH) at (516) 227-9692. We want you to be informed about your drinking water. If you want to learn more, please visit the EPA's website at <http://www.epa.gov/safewater/>, the Department of Health's website at <http://www.health.state.ny.us/>, or attend any of our regularly scheduled board meetings each Wednesday at 8:00 a.m. All meetings are held at the District Office unless otherwise announced.

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 that 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 water source for the Port Washington Water District is groundwater pumped from 12 wells (ranging from 90' to 600'

in depth) located at eight stations throughout the District. These wells are drilled into the Glacial, Port Washington, Magothy, and Lloyd Aquifers beneath Long Island. The District also includes over 110 miles of water mains varying in size from 4" to 24" in diameter, approximately 1089 fire hydrants, and 24.25 million gallons in storage capacity, that includes 1.25 million gallons in two elevated storage tanks, 1 million gallons in one ground storage tank, and 22 million gallons in one concrete underground storage reservoir. The District is 100% metered and has an active cross connection control program in compliance with the State sanitary code.

The NCDOH has completed a Source Water Assessment Program for the Port Washington Water District. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water; it does not mean that the water delivered to consumers is, or will, become contaminated. See the section "**ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from 12 wells. The Source Water Assessment has rated all but one of the wells as having a very high susceptibility to industrial solvents and all wells as having a high to very high susceptibility to nitrates. One well is rated as having a medium high susceptibility to microbial contamination. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/industrial facilities and related activities in the assessment area. The elevated susceptibility to nitrates is due to unsewered residential land use and related practices, such as fertilizing lawns, as well as the commercial/industrial activities in the assessment area.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the NCDOH.

HOW IS OUR DRINKING WATER TREATED?

Disinfection is required by the NCDOH. Calcium hypochlorite is routinely added to the ground level reservoirs to maintain chlorine residual. The District disinfects its water supply with tablet chlorine at each pumping station. Sodium hydroxide is routinely added at all well stations to maintain optimum pH levels and reduce corrosivity. Granulated activated carbon (GAC) adsorption facilities are used for organic chemical removal at five wells. Volatile organic chemicals are removed at four wells using packed tower aeration (air stripping towers). A nitrate removal facility treats water for elevated nitrates at the Hewlett Well No. 4 station.

FACTS AND FIGURES

Our water system serves approximately 30,000 residents through 9,408 service connections. The total water produced in 2020 was 1,320,866,000 gallons. The daily average of water treated and pumped into the distribution system is 3,608,923 gallons. Pumpage on our highest single day, June 4, 2020, was 8,088,000 gallons. The amount of water delivered to customers was 1,334,712,701 gallons. The amount of water delivered appears to be higher than the amount of water produced due to the billing cycle of the District which overlaps into the next year. In general terms, during 2020, Port Washington Water District residential customers were charged an approximate annual cost of \$312.40 and had an annual average residential water use of 141,870 gallons.

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, Escherichia coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. 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.

A supplement to this report showing laboratory analyses of all samples taken from each water supply well in service (raw and treated), from each storage tank, and from the distribution system is available for viewing in the District office and in the Port Washington Public Library. Contact Italo J. Vacchio, Superintendent, at the Port Washington Water District office, (516) 767-0171, located at 38 Sandy Hollow Road, Port Washington, NY 11050.

Contamination of the groundwater from Port Washington Water District has been detected in samples from some wells. All groundwater pumped to the distribution system from the operating District wells complies with New York State Department of Health Standards for public drinking water supplies. It should be noted that all drinking water, including bottled drinking water, may reasonably be 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 (1-800-426-4791) or the NCDOH at (516) 227-9692.

The table presented on page 4, Table 1, shows the results of our monitoring for the period of January 1 to December 31, 2020. Table 1 depicts which compounds were detected in your water. Not included in the table are the more than 100 other contaminants which were tested for and not detected in the wells and distribution system. These undetected contaminants are listed herein:

Organics (also including Synthetic Organics and Other Principal Organics) - 1,1,1,2-Tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1,2-trichlorotrifluoroethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2/4-chlorotoluene, benzene, bromobenzene, bromochloromethane, bromodichloromethane, bromomethane, carbon tetrachloride, chlorobenzene, chlorodifluoromethane, chloroethane, chloromethane, dibromomethane, dichlorodifluoromethane, ethylbenzene, hexachloro-1,3-butadiene, isopropylbenzene, methylene chloride, styrene, tetrachloroethene, toluene, trichlorofluoromethane, vinyl chloride, cis-1,3-dichloropropene, m,p-xylene, n-butylbenzene, n-propylbenzene, o-xylene, p-isopropyltoluene, sec-butylbenzene, tert-butylbenzene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane, alachlor, aldrin, chlordane, dieldrin, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, methoxychlor, toxaphene, gamma-BHC (lindane), 2,4,5-TP (Silvex), 2,4-D, dalapon, dicamba, dinoseb, pentachlorophenol, picloram, 3-hydroxycarbofuran, aldicarb, aldicarb sulfone, aldicarb sulfoxide, carbaryl, carbofuran, methomyl, oxamyl, glyphosate, endothall, and diquat.

Microbiological – Escherichia coli and turbidity.

Inorganics and Physical Characteristics – Antimony, arsenic, beryllium, cadmium, chromium, cobalt, color, free cyanide, MBAS, mercury, nitrite as N, nitrogen-ammonia, odor, perchlorate, silver, and thallium.

Disinfection By-Products [Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)] – bromoacetic acid, chloroacetic acid, dichloroacetic acid, and trichloroacetic acid.

Unregulated Contaminant Monitoring Rules 3/4 – germanium, alpha-BHC, chlorpyrifos, dimethipin, ethoprop, oxyfluorfen, permethrin, profenofos, tebucaonazole, tribufos, n-butanol, 2-methoxyethanol, 2-propen-1-ol, total organic carbon, bromodichloroacetic acid, chlorodibromoacetic acid, bromoacetic acid, chloroacetic acid, tribromoacetic acid, trichloroacetic acid, butylated hydroxyanisole, o-toluidine, and quinoline.

The highest level of a contaminant that is allowed in drinking water is known as the Maximum Contaminant Level (MCL). The level of a contaminant below which there is no known or expected risk to health is known as the Maximum Contaminant Level Goal (MCLG). MCLGs allow for a margin of safety.

The highest level of a disinfectant allowed in drinking water is known as the Maximum Residual Disinfectant Level (MRDL). There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants. The level of a drinking water disinfectant below which there is no known or expected risk to health is known as the Maximum Residual Disinfectant Level Goal (MRDLG). MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow is known as the Action Level (AL).

Sampling for radiological contaminants is done every 3 years in accordance with NCDOH standards. The sampling results presented in this report are from the most recent radiological sampling that was done in 2019. Raw water samples were collected from District wells and analyzed for gross alpha activity, gross beta, radium 226, and radium 228. The maximum contaminant level for gross alpha activity in water is 15 pCi/L. The 2019 highest sampling result for gross alpha is 2.97 pCi/L. The State level of concern for beta particles is 50 pCi/L. The 2019 highest sampling result for gross beta is 4.05 pCi/L. The maximum contaminant level for combined radium 226/228 in water is 5 pCi/L. The 2019 highest result for the combined radium 226/228 sampling is 4.4 pCi/L. The maximum contaminant level for uranium in water is 30 ug/L. The 2019 highest calculated result for uranium is 1.49 ug/L.

Sampling for lead and copper contaminants is done every 3 years in accordance with NCDOH standards. The sampling results presented in this report are from the most recent lead and copper sampling that was done in 2018. Samples were collected from the distribution system at thirty sites and analyzed for lead and copper. Lead is measured in micrograms per Liter (ug/L). The Action Level (AL) for lead is 15 ug/L. The AL for lead was not exceeded at any of the sites tested. Copper is measured in milligrams per Liter (mg/L). The AL for copper is 1.3 mg/L, and the MCLG for copper is 1.3 mg/L. The AL for copper was not exceeded at any of the sites tested.

The levels of lead and copper presented in Table 1 indicate the 90th percentile of those contaminants at the 30 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 and copper values detected at your water system. Thirty samples were collected from your water system and the 90th percentile values for lead and copper were the twenty-seventh highest values for those contaminants. The 90th percentile for lead as shown in Table 1 is 5 ug/L and the 90th percentile for copper as shown in Table 1 is 0.2 mg/L.

WHAT DOES THIS INFORMATION MEAN?

As you can see by Table 1, 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.

Although nitrate was detected below the MCL, it was detected at 7.2 mg/L which is greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water:

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant, you should ask for advice from your health care provider.

We also 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 and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Port Washington Water District 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 or at www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The New York State Department of Health (NYSDOH) issued a deferral on November 24, 2020 to the Port Washington Water District for MCL compliance for 1,4-dioxane. This deferral acts as an exemption or State permission not to meet an MCL under certain conditions. When a public water system (PWS) is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new PFOS, PFOA or 1,4-dioxane MCLs. In exchange, the NYSDOH agrees to defer enforcement actions, such as assessing fines, if the PWS is meeting established deadlines. Deferral recipients are required to update the NYSDOH and the NCDOH each calendar quarter on the status of established deadlines. The NYSDOH can resume enforcement if the agreed-upon deadlines are not met.

The 1,4-dioxane contaminant was found in the District drinking water above the New York State MCL of 1.0 ug/L during 2020. The 1,4-dioxane MCL is set well below the level known to cause health effects in animal studies. Therefore, consuming water with 1,4-dioxane at the levels detected does not pose a significant health risk and the water continues to be acceptable for all uses.

Table 1							
Contaminant	Violation Yes / No	Date of Sample(s)	Level Detected Avg /Max (Range) ⁽¹⁾	Unit Measurement	MCLG OR MRDLG	Regulatory Limit (MCL, MRDL, or AL)	Likely Source of Contamination
Microbiological Contaminant							
Total Coliform	No	4/1/20	2.32% of samples positive (1 of 43) ⁽²⁾	n/a	0	TT - greater than or equal to 5% samples positive	Naturally present in the environment
Inorganic Contaminants							
Barium	No	7/13/20	0.064 (ND-0.064)	mg/L	2	MCL - 2	Discharge from metal refineries; Erosion of natural deposits
Calcium	No	4/20/20	33.3 (ND-33.3)	mg/L	n/a	n/a	Naturally occurring
Chloride	No	7/13/20	73.0 (ND-73.0)	mg/L	n/a	MCL - 250	Naturally occurring or indicative of road salt contamination
Iron	No	4/21/20	0.14 (ND-0.14)	ug/L	n/a	MCL - 300	Naturally occurring
Magnesium	No	7/13/20	16.5 (ND-16.5)	mg/L	n/a	n/a	Naturally occurring
Manganese	No	4/20/20	0.15 (ND-0.15)	ug/L	n/a	MCL - 300	Naturally occurring
Nickel	No	5/18/20	0.002 (ND-0.002)	mg/L	n/a	n/a	Naturally occurring
Sodium	No	4/1/20	35.6 (ND-35.6)	mg/L	n/a	20 / 270 ⁽³⁾	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	No	4/20/20	54.3 (ND-54.3)	mg/L	n/a	MCL - 250	Naturally occurring
Zinc	No	5/18/20	0.13 (ND-0.13)	mg/L	n/a	MCL - 5	Naturally occurring
Inorganic Contaminants (Nitrate)							
Nitrate as N	No	3/9/20	7.2 (1.7-7.2)	mg/L	10	MCL - 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate-Nitrite (as N)	No	3/9/20	7.2 (1.7-7.2)	mg/L	10	MCL - 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Physical Characteristics							
Calcium Hardness	No	4/20/20	83.2 (ND-83.2)	mg/L	n/a	n/a	Naturally occurring
Corrosivity	No	5/18/20	7.6 [(-2.0)-7.6]	-	n/a	n/a	Naturally occurring
pH	No	5/18/20	7.6	units	n/a	7.5-8.5 ⁽⁴⁾	Naturally occurring
Total Alkalinity	No	4/20/20	68.7 (ND-58.2)	mg/L	n/a	n/a	Naturally occurring
Total Dissolved Solids	No	4/20/20	250.0 (156.0-250.0)	mg/L	n/a	n/a	Naturally occurring
Total Hardness	No	4/20/20	137.0 (67.8-137.0)	mg/L	n/a	n/a	Naturally occurring
Disinfectant							
Chlorine Residual	No	5/18/20	0.81 (ND-1.45)	mg/L	n/a	MRDL - 4 ⁽⁵⁾	Water additive used to control microbes
Volatile Organic Contaminants							
1,1 - Dichloroethane	No	3/9/20	1.80 (ND-2.10)	ug/L	n/a	MCL - 5	Discharge from industrial chemical factories
Cis - 1,2 - Dichloroethene	No	3/9/20	0.29 (ND-0.51)	ug/L	n/a	MCL - 5	Discharge from industrial chemical factories
Other Principal Organic Contaminant							
1,1 - Dichloroethane	No	7/6/20	4.7 (ND-4.7)	ug/L	n/a	MCL - 5	Released into the environment as fugitive emissions; Degreasing agent
Additional Contaminant							
Methyl Tertiary Butyl Ether (MTBE)	No	1/6/20	0.39 (ND-0.65)	ug/L	n/a	MCL - 5	Released into the environment as fugitive emissions; Degreasing agent
Disinfection By-Products - Routine Sampling							
Bromoform	No	10/26/20	0.31 (ND-0.74)	ug/L	n/a	MCL - 80	By-product of drinking water chlorination needed to kill harmful organisms
Chloroform	No	10/13/20	0.29 (ND-0.53)	ug/L	n/a	MCL - 80	By-product of drinking water chlorination needed to kill harmful organisms
Radioactive Contaminants							
Gross Alpha Activity	No	6/12/19	2.97 [0-2.97]	pCi/L	0	MCL - 15	Erosion of natural deposits
Gross Beta	No	6/12/19	4.05 [0-4.05]	pCi/L	0	50 ⁽⁶⁾	Decay of natural deposits and man-made emissions
Combined Radium 226/228	No	6/12/19	4.4 (0-4.4)	pCi/L	0	MCL - 5	Erosion of natural deposits
Uranium	No	6/12/19	1.49 (0-1.49)	ug/L	0	MCL - 30	Erosion of natural deposits

Synthetic Organic Contaminants Including Pesticides and Herbicides							
1,4 - Dioxane	No	3/13/20	6.2 (0.026-6.2)	ug/L	n/a	MCL - 1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Perfluorooctanesulfonic Acid	No	4/1/20	5.5 (ND-5.5)	ng/L	n/a	MCL - 10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanoic Acid	No	5/11/20	14.8 (ND-14.8)	ng/L	n/a	MCL - 10	Released into the environment from widespread use in commercial and industrial applications.
Unregulated Contaminant Monitoring Rule 3 Contaminants ⁽⁷⁾							
Chromium, Hexavalent	No	2/13/20	3.1 (ND-3.1)	ug/L	n/a	n/a	Naturally occurring; Industrial discharge from plating industry
Perfluorobutanesulfonic Acid	No	5/11/20	4.7 (ND-4.7)	ng/L	n/a	MCL - 50,000	Released into the environment through consumer products and industrial processes
Perfluoroheptanoic Acid	No	12/7/20	5.0 (ND-5.0)	ng/L	n/a	MCL - 50,000	Released into the environment through consumer products and industrial processes
Perfluorohexanesulfonic Acid	No	5/4/20	4.9 (ND-4.9)	ng/L	n/a	MCL - 50,000	Released into the environment through consumer products and industrial processes
Perfluorononanoic Acid	No	9/9/20	44.0 (ND-44.0)	ng/L	n/a	MCL - 50,000	Released into the environment through consumer products and industrial processes
Contaminant	Violation Yes / No	Date of Sample	90 th Percentile and Range	Unit Measurement	MCLG	Regulatory Limit (AL)	Likely Source of Contamination
Lead and Copper Contaminants							
Copper	No	6/22/18	0.44 (0.013-0.44) ⁽⁸⁾	mg/L	1.3	AL - 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	7/14/18	5.0 (ND-11.4) ⁽⁹⁾	ug/L	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits
Contaminant	Violation Yes / No	Date of Sample	Highest Result and Range of Results ⁽¹⁰⁾	Unit Measurement	MCLG	Regulatory Limit (MCL)	Likely Source of Contamination
Disinfection By-Products, Stage II Sampling							
Total Haloacetic Acids	No	9/8/20	2.1 (ND-2.1)	ug/L	n/a	MCL - 60	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes	No	9/8/20	13.5 (ND-13.5)	ug/L	n/a	MCL - 80	By-product of drinking water chlorination needed to kill harmful organisms

Notes:

- (1) When compliance with the MCL is determined more frequently than annually, the data reported is the highest average or maximum of any of the sampling points used to determine compliance and the range of detected values.
- (2) In April 2020, total coliforms were detected in 1 of 43 routine compliance samples collected in our system. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water system. After this detection, additional samples were collected and total coliforms were not detected in those samples. Since total coliforms were detected in <5% of the samples collected during each of those months, the system did not trigger Level 1 assessments. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected.
- (3) 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.
- (4) NCDOH regulatory guideline.
- (5) The value presented represents the Maximum Residual Disinfectant Level (MRDL). MRDLs are not currently regulated, but in the future they will be enforceable in the same manner as MCLs.

- (6) The State considers 50 pCi/L to be the level of concern for beta particles.
- (7) The Unregulated Contaminant Monitoring Rule 3 (UCMR3) is a US EPA water quality sampling program which monitors unregulated but emerging contaminants in drinking water. The results of the sampling will determine if such contaminants will need to be regulated in the future.
- (8) The level presented represents the 90th percentile of the 30 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 copper values detected at your water system. In this case, thirty samples were collected at your water system and the 90th percentile value was the twenty-seventh highest value (0.44 mg/L). The action level for copper was not exceeded at any of the sites tested.
- (9) The level presented represents the 90th percentile of the 30 sites tested. The action level for lead was not exceeded at any of the sites tested.
- (10) The levels represent the highest results and the range of results.

Definitions:

- MCL: Maximum Contaminant Level; The level of a contaminant in drinking water. MCLs are set as close to the MCLG as feasible.
- MCLG: Maximum Contaminant Level Goal; 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.
- MRDL: Maximum Residual Disinfectant Level; 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.
- MRDLG: Maximum Residual Disinfectant Level Goal; 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.
- AL: Action Level; The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ND: Non-Detects, laboratory analysis indicates that the constituent is not present.

- mg/L: Milligrams per Liter; Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
- ug/L: Micrograms per Liter; Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
- ng/L: Nanograms per Liter; Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).
- pCi/L: Picocuries Per Liter; A measure of the radioactivity in water.
- n/a: not applicable; i.e., no value is assigned by regulatory authorities.

The deferral period is effective until August 25, 2022. During this period, the District is implementing an action plan which includes designing and constructing Advanced Oxidation Process (AOP) treatment systems for the removal of 1,4-dioxane, mandatory water conservation measures, and irrigation limitations while impacted wells are offline for the construction of the new treatment systems. This compliance deferral is a proactive measure reserved for long periods of hot, dry weather or emergency circumstances. Additional information will be shared as further testing and progress occurs. This process is similar for any chemical detected in public drinking water that requires mitigation.

The District is also required to submit a quarterly update to the NYSDOH and the NCDOH on the status of the projects. At the Hewlett Well 4 Station, detailed design documents were submitted to the NCDOH and NYSDOH for regulatory review in the first quarter of 2021. Once design documents are reviewed and approved, construction can begin, scheduled to start in May 2021. To date, review comments from the regulatory agencies have not been received. Although it has been granted a deferral, the PWWD was able to avoid or minimize the usage of this well.

At the Christopher Morley Park Station, the Wells 8, 9, and 11 AOP project is nearing the end of the design phase and the detailed design has begun concurrently. The basis of design report (BODR) is on schedule to be submitted to the NCDOH in March 2021. The AOP pilot test field activities were completed in November 2020 and the pilot test report is under final review. Only Well 9 at the station exceeds the MCL for 1,4-dioxane. Although a deferral has been granted, the District will continue to ensure the use of Well 9 is either minimized or avoided.

At the Stonytown Well 10 Station, the AOP project is currently in the design phase. Part of the conceptual design plans include analysis of the need for nitrate treatment due to elevated nitrate levels. It is proposed to add the potential nitrate treatment into the proposed AOP treatment building to minimize the need to obtain additional land. Although a deferral has been granted, the District will continue to ensure the use of Stonytown Well 10 is either minimized or avoided.

More information on the progress of the projects can be found at <http://pwwd.org/port-washington-water-district-quarterly-deferral-report/>. The full deferral approval notification and project schedule is included in this report as Appendix A.

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. 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).

INFORMATION ON UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which the EPA has not established drinking water standards. In 2020, the Port Washington Water District monitored for additional contaminants under the EPA Unregulated Contaminant Monitoring Rule 3 (UCMR 3). The information collected under the UCMR 3 will help the EPA determine future drinking water regulations. The results of the monitoring program are included in Table 1 and the associated laboratory results are included in the supplement. For any other questions regarding this monitoring program, please contact Italo J. Vacchio, Superintendent of the Port Washington Water District, at (516) 767-0171.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Water is a vital resource and the Port Washington Water District encourages water conservation. The District, after holding a public hearing, adopted a Water Conservation Plan in 1996. This was updated in April 2017 and recent amendments to the Plan were issued on March 18, 2020. This plan contains regulations concerning plumbing fixtures and use of water for irrigation, swimming pools, air conditioning, car washing, etc., and is designed to reduce unnecessary water use. Although our system has an adequate amount of water to meet present and future demands under normal operating conditions, the amendments we issued on March 18, 2020 explain the mandatory reduction in irrigation water usage.

Three supply wells were taken offline during 2020 to construct new treatment systems to remove emerging contaminants in our water supply. Residents must conserve during the hotter months or the District will not be able to meet all the community's water needs. The mandatory measures, which have been mailed to each resident, are aimed at reducing water consumed by irrigation systems - the driving force behind a nearly 150 percent increase in water consumption between May and September.

Every resident with an automatic irrigation system must reduce watering on each zone by four minutes as this simple step can reduce water consumption by as much as 20 percent. Mandates also have been placed on the times of day each of the District's service territories can irrigate. The purpose of this change is to systematically spread out the periods when irrigation systems engage so the system isn't overwhelmed and can meet demand. The irrigation zones have been divided as follows:

- 7:00-9:00 p.m.: Municipal and commercial properties
- 10:00 p.m.-12:00 a.m.: Manorhaven and Flower Hill West (west of Route 101)
- 11:00 p.m.-1:00 a.m.: Baxter Estates and Plandome Manor
- 1:00-3:00 a.m.: Port Washington North and Flower Hill East (east of Route 101)
- 3:00-5:00 a.m.: Port Washington (unincorporated areas)

Similar to years past, the District is also requiring all residents to strictly adhere to Nassau County's Lawn Watering Ordinance which states that lawn watering is prohibited between 10:00 a.m. and 4:00 p.m. In addition, the ordinance stipulates that odd-numbered addresses may only water on odd-numbered days, and even-numbered or non-numbered addresses may only water on even-numbered days. Residents who manually irrigate their lawns and gardens are being asked to restrict watering to 15 minutes per area with a maximum duration of two hours per day. Those who manually irrigate are also required to follow Nassau County's Lawn Watering Ordinance.

The installation of smart irrigation controllers is being strongly recommended for any resident with an automatic irrigation system. Smart controllers connect to local WiFi to capture weather data along with other information to more accurately assess the watering needs of lawns and gardens. The District has a rebate program which provides an up to \$150 rebate to residents who upgrade from a manual timer to a smart controller.

Additional conservation measures include the installation of a rain sensor and soil moisture sensor if residents do not have one already. If a resident has these devices installed, they should make sure they are working properly and

consistently check irrigation systems for leaks and breaks as they can unknowingly waste thousands of gallons of water. The District also recommends residents consider native and drought-resistant plants for their gardens as well as embracing gardening trends such as xeriscaping.

SYSTEM IMPROVEMENTS

In 2020, the Port Washington Water District made improvements to the water system, including the rehabilitation of the Ricks Well 7 and the replacement of the Soundview water mains in the District. In 2021, the major planned improvements include the design of advanced oxidation process treatment systems to be in compliance with recent contaminant regulations.

CLOSING

Thank you for allowing us to continue to provide your family with clean, quality drinking water again this year. The Port Washington Water District works hard to provide top quality water to every customer. We ask that all our customers help us protect our water resources. Please visit the Port Washington Water District on the Web at www.pwwd.org to download Water District Regulations, access the full Annual Water Quality Report, and check on recent District legislation, planned events, and projects.

APPENDIX A

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Deferral Issued for 1,4-Dioxane in the Port Washington Water District

Why are you receiving this notice/information?

You are receiving this notice because testing of our public water system found the chemical 1,4-dioxane in your drinking water above New York State's maximum contaminant level (MCL) of 1 ppb for 1,4-dioxane*. The MCLs are set well below levels known to cause health effects in animal studies. Therefore, consuming water with 1,4-dioxane at the level detected does not pose a significant health risk. Your water continues to be acceptable for all uses.

The Port Washington Water District has submitted, and the New York State Department of Health (Department) has issued, a deferral to the Port Washington Water District. When a public water system is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new MCLs. In exchange, the Department agrees to defer enforcement actions, such as assessing fines, if the water district is meeting the established deadlines. We are required to update the Department and the Nassau County Department of Health each calendar quarter on the status of our projects. If we do not meet the agreed upon deadlines, the Department can resume enforcement.

What are the health effects of 1,4-dioxane?

Laboratory studies show that 1,4-dioxane caused liver cancer in animals exposed at high levels throughout their lifetime. Other types of cancer have also been reported, although less consistently than liver cancer. There is no evidence of 1,4-dioxane cancer effects in humans. The United States Environmental Protection Agency considers 1,4-dioxane a likely human carcinogen based upon studies of animals exposed to high levels of this chemical over their entire lifetimes.

At the level of 1,4-dioxane detected in your water, exposure from drinking water and food preparation is well below 1,4-dioxane exposures associated with health effects.

What is New York State doing about 1,4-dioxane in public drinking water?

The New York State Department of Health (NYS DOH) has adopted a drinking water regulation that requires all public water systems to test for 1,4-dioxane. If found above the MCLs, the water supplier must take steps to lower the level to meet the standard. Exceedances of the MCL signal that steps should be taken by the water system to reduce contaminant levels.

What is being done to remove these contaminants?

The Port Washington Water District has prepared and implemented an action plan which includes: designing and constructing Advanced Oxidation Process (AOP) treatment systems for the removal of 1,4-dioxane, mandatory water

conservation measures and irrigation limitations while impacted wells are offline for the construction of the new treatment systems, this compliance deferral is a proactive measure reserved for long periods of hot, dry weather or emergency circumstances. Additional information will be shared as further testing and progress occurs. This process is similar for any chemical detected in public drinking water that requires mitigation. The compliance timetable will ensure that your drinking water will meet the MCL as rapidly as possible. The deferral is effective until August 25, 2022.

Where can I get more information?

For more information, please contact Italo J. Vacchio, Superintendent of the Port Washington Water District at

(516) 767-0171 or tvacchio@pwwd.org. You can also contact the Nassau County Health Department at (516) 227-9692.

If you have additional questions about these contaminants and your health, talk to your health care provider who is most familiar with your health history and can provide advice and assistance about understanding how drinking water may affect your personal health.

*At this time, only one well is exhibiting levels of 1,4-dioxane above the MCL and it is currently offline (12/15/2020)

Public Water System ID# 2912267

Date 12/15/20

PROJECT SCHEDULES ASSOCIATED WITH MCL DEFERRAL

Hewlett Well 4 AOP Project Schedule

Task Name	2020			2021				2022							
	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Design		█													
Permitting								█							
Construction									█						
Startup and Testing													█		
Plant is Operational															█

Christopher Morley Park Station AOP Project Schedule

Task Name	2021				2022				2023						
	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
Design	█														
Permitting						█									
Construction							█								
Startup and Testing												█			
Plant is Operational															█

Stonytown Well 10 AOP Project Schedule

Task Name	2020				2021				2022				2023		
	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
Design	█														
Permitting						█									
Construction							█								
Startup and Testing												█			
Plant is Operational															█