



ANNUAL DRINKING WATER QUALITY REPORT FOR 2019

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

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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 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.

During 2019, as in previous years, we had the following restrictions on our system as mandated by the New York State Department of Environmental Conservation. The total annual pumpage at the Stonytown Well No. 10 was restricted to 175 million gallons per year. The Sandy Hollow Wells No. 1 and 2 were restricted to a total pumpage of 30 million gallons per month. The Bar Beach Well No. 6 was restricted to maximum chloride content at the well discharge of 75 mg/L.

The Nassau County Department of Health 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 1 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 Nassau County Department of Health.

HOW IS OUR DRINKING WATER TREATED?

Disinfection is required by the Nassau County Department of Health. 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 9,389 service connections. The total water produced in 2019 was 1,265,048,000 gallons. The daily average of water treated and pumped into the distribution system is 3,465,885 gallons. Pumpage on our highest single day, August 16, 2019, was 6,578,000 gallons. The amount of water delivered to customers was 1,153,662,705 gallons. This leaves an unaccounted-for total of 111,385,295 gallons (8.8% of the total amount produced). This water was used to flush mains; fight fires; fill road sweepers and tanker trucks; and during water main breaks, leakage in mains and water services, and unauthorized use of hydrants. In general terms, during 2019, Port Washington Water District residential customers were charged an approximate annual cost of \$479.38 and had an annual average residential water use of 122,874 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 Nassau County Department of Health at (516) 227-9692.

The table presented below, Table 1, shows the results of our monitoring for the period of January 1 to December 31, 2019. 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.

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 Nassau County Department of Health 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 result for uranium is 1.49 ug/L.

Sampling for lead and copper contaminants is done every 3 years in accordance with Nassau County Department of Health 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 6.7 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. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. 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.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable

| 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 Contaminants | | | | | | | |
| Total Coliform | No | 9/17/2019 | 3 samples positive ⁽²⁾ | n/a | 0 | TT - greater than or equal to 5% samples positive | Naturally present in the environment |
| Turbidity | No | 5/22/2019 | 2.6 (ND - 2.6) | NTU | n/a | MCL - 5 | Naturally occurring |
| Inorganic Contaminants | | | | | | | |
| Barium | No | 5/20/2019 | 0.042 (0.015 - 0.042) | mg/L | 2 | MCL - 2 | Discharge from metal refineries; Erosion of natural deposits |
| Calcium | No | 4/11/2019 | 42.6 (7 - 42.6) | mg/L | n/a | n/a | Naturally occurring |
| Chloride | No | 4/12/2019 | 73.3 (5.5 - 73.3) | mg/L | n/a | MCL - 250 | Naturally occurring or indicative of road salt contamination |
| Fluoride | No | 5/20/2019 | 0.17 (ND - 0.17) | mg/L | n/a | MCL - 2.2 | Erosion of natural deposits |
| Iron | No | 5/22/2019 | 2300 (ND - 2300) | ug/L | n/a | MCL - 300 | Naturally occurring |
| Magnesium | No | 5/17/2019 | 125 (4.1 - 125) | mg/L | n/a | n/a | Naturally occurring |
| Manganese | No | 4/11/2019 | 120 (ND - 120) | ug/L | n/a | MCL - 300 | Naturally occurring |
| Nickel | No | 5/20/2019 | 0.0021 (ND - 0.0021) | mg/L | n/a | n/a | Naturally occurring |
| Selenium | No | 4/11/2019 | 2.3 (ND - 2.3) | ug/L | 50 | MCL - 50 | Discharge from petroleum and metal refineries; Erosion of natural deposits |
| Sodium | No | 4/11/2019 | 33.6 (5.4 - 33.6) | mg/L | n/a | 20 / 270 ⁽³⁾ | Naturally occurring; Road salt; Water softeners; Animal waste |
| Sulfate | No | 4/11/2019 | 114 (ND - 114) | mg/L | n/a | MCL - 250 | Naturally occurring |
| Zinc | No | 5/20/2019 | 0.062 (ND - 0.062) | mg/L | n/a | MCL - 5 | Naturally occurring |
| Inorganic Contaminants (Nitrate) | | | | | | | |
| Nitrate as N | No | 3/5/2019 | 6.7 (0.12 - 6.7) | mg/L | 10 | MCL - 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Nitrate-Nitrite (as N) | No | 3/5/2019 | 6.7 (0.12 - 6.7) | mg/L | 10 | MCL - 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Physical Characteristics | | | | | | | |
| Calcium Hardness | No | 4/11/2019 | 106 (17.6 - 106) | mg/L | n/a | n/a | Naturally occurring |
| Corrosivity | No | 4/11/2019 | -1.18 [-3.28 - (-1.18)] | - | n/a | n/a | Naturally occurring |
| pH | No | 7/1/2019 | 8.8 (5.9 - 8.8) | units | n/a | n/a | Naturally occurring |
| Total Alkalinity | No | 4/11/2019 | 62.5 (25.5 - 62.5) | mg/L | n/a | n/a | Naturally occurring |
| Total Dissolved Solids | No | 4/12/2019 | 480 (78 - 480) | mg/L | n/a | n/a | Naturally occurring |
| Total Hardness | No | 4/11/2019 | 187 (34.3 - 187) | mg/L | n/a | n/a | Naturally occurring |
| Disinfectant | | | | | | | |
| Chlorine Residual | No | 6/10/2019 | 1.9 (0.2 - 1.9) | mg/L | n/a | MRDL - 4 ⁽⁴⁾ | Water additive used to control microbes |
| Volatile Organic Contaminants | | | | | | | |
| Cis - 1,2 - Dichloroethene | No | 11/12/2019 | 5 (ND - 5) | ug/L | n/a | MCL - 5 | Discharge from industrial chemical factories |
| Trichloroethene | No | 7/9/2019 | 0.52 (ND - 0.52) | ug/L | n/a | MCL - 5 | Discharge from industrial chemical factories |
| Other Principal Organic Contaminant | | | | | | | |
| 1,1 - Dichloroethane | No | 12/13/2019 | 2.1 (ND - 2.1) | ug/L | n/a | MCL - 5 | Released into the environment as fugitive emissions; Degreasing agent |
| Additional Contaminant | | | | | | | |
| Methyl Tertiary Butyl Ether (MTBE) | No | 6/12/2019 | 0.51 (ND - 0.51) | ug/L | n/a | MCL - 5 | Released into the environment as fugitive emissions; Degreasing agent |
| Disinfection By-Products - Routine Sampling | | | | | | | |
| Bromoform | No | 1/7/2019 | 1 (ND - 1) | ug/L | n/a | MCL - 80 | By-product of drinking water chlorination needed to kill harmful organisms |
| Chloroform | No | 11/12/2019 | 1.1 (ND - 1.1) | ug/L | n/a | MCL - 80 | By-product of drinking water chlorination needed to kill harmful organisms |
| Radioactive Contaminants | | | | | | | |
| Gross Alpha Activity | No | 6/12/2019 | 2.97 (-0.36 - 2.97) | pCi/L | 0 | MCL - 15 | Erosion of natural deposits |
| Gross Beta | No | 6/12/2019 | 4.05 (-0.57 - 4.05) | pCi/L | 0 | 50 ⁽⁵⁾ | Decay of natural deposits and man-made emissions |

| | | | | | | | |
|--|--------------------|----------------|---|------------------|------|------------------------|---|
| Combined Radium 226/228 | No | 6/12/2019 | 4.4 (0.986 - 4.4) | pCi/L | 0 | MCL - 5 | Erosion of natural deposits |
| Uranium | No | 6/12/2019 | 1.49 (-0.18 - 1.49) | ug/L | 0 | MCL - 30 | Erosion of natural deposits |
| Unregulated Contaminant Monitoring Rules 3/4 Contaminants⁽⁶⁾ | | | | | | | |
| Bromochloroacetic Acid | No | 3/25/2019 | 0.53 (ND - 0.53) | ug/L | n/a | n/a | By-product of drinking water disinfection needed to kill harmful organisms |
| Chromium | No | 2/4/2019 | 3.4 (ND - 3.4) | ug/L | 100 | MCL - 100 | Erosion of natural deposits |
| Chromium, Hexavalent | No | 5/17/2019 | 3.6 (ND - 3.6) | ug/L | n/a | n/a | Naturally occurring; Industrial discharge from plating industry |
| Dibromoacetic Acid | No | 3/25/2019 | 0.81 (0.64 - 0.81) | ug/L | n/a | MCL - 60 | By-product of drinking water disinfection needed to kill harmful organisms |
| 1,4 - Dioxane | No | 9/9/2019 | 4.5 (0.0058 - 4.5) | ug/L | n/a | 35 ⁽⁷⁾ | Used as a solvent for cellulose formulations, resins, oils, waxes, and other organic substances. Also used in wood-pulping, textile processing, de-greasing, in lacquers, paints, varnishes, and stains; and in paint and varnish removers |
| Perfluorobutanesulfonic Acid (PFBS) | No | 10/25/2019 | 5.7 (ND - 5.7) | ng/L | n/a | 70 ⁽⁸⁾ | Released into the environment through consumer products and industrial processes |
| Perfluoroheptanoic Acid (PFHpA) | No | 8/20/2019 | 4.4 (ND - 4.4) | ng/L | n/a | 70 ⁽⁸⁾ | Released into the environment through consumer products and industrial processes |
| Perfluorohexanesulfonic Acid (PFHxS) | No | 5/22/2019 | 5.01 (ND - 5.01) | ng/L | n/a | 70 ⁽⁸⁾ | Released into the environment through consumer products and industrial processes |
| Perfluorononanoic Acid (PFNA) | No | 2/4/2019 | 53.9 (ND - 53.9) | ng/L | n/a | 70 ⁽⁸⁾ | Released into the environment through consumer products and industrial processes |
| Perfluorooctanoic Acid (PFOA) | No | 10/25/2019 | 14.9 (ND - 14.9) | ng/L | n/a | 70 ⁽⁹⁾ | Used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams at airfields. Many of these uses have been phased out by U.S. manufacturers; however, there are still some ongoing uses. |
| Perfluorooctanesulfonic Acid (PFOS) | No | 5/21/2019 | 9.93 (ND - 9.93) | ng/L | n/a | 70 ⁽⁹⁾ | Used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams at airfields. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses. |
| 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 | 7/14/2018 | 0.2 (0.013 - 0.44) ⁽¹⁰⁾ | mg/L | 1.3 | AL - 1.3 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead | No | 7/14/2018 | 5 (ND - 11.4) ⁽¹¹⁾ | ug/L | 0 | AL - 15 | Corrosion of household plumbing systems; Erosion of natural deposits |
| Contaminant | Violation Yes / No | Date of Sample | Highest LRAA Detected (Maximum / Range) | Unit Measurement | MCLG | Regulatory Limit (MCL) | Likely Source of Contamination |
| Disinfection By-Products, Stage II Sampling | | | | | | | |
| Total Haloacetic Acids | No | 9/10/2019 | 1.28 (ND - 2.1) ⁽¹²⁾ | ug/L | n/a | MCL - 60 | By-product of drinking water disinfection needed to kill harmful organisms |
| Total Trihalomethanes | No | 9/10/2019 | 9.2 (ND - 13.5) ⁽¹²⁾ | ug/L | n/a | MCL - 80 | By-product of drinking water chlorination needed to kill harmful organisms |

Notes:

- 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.
- In July 2019, total coliforms were detected in 2 of 80 routine compliance samples collected in our system. Again, in September 2019, total coliforms were detected in 3 of the 50 routine compliance samples collected at 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 these detections, 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.
- 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.

- 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.
- The State considers 50 pCi/L to be the level of concern for beta particles.
- The Unregulated Contaminant Monitoring Rules 3/4 (UCMR3/4) are United States Environmental Protection Agency (US EPA) water quality sampling programs 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.
- The level represents a health advisory for 1,4-dioxane as a UCMR3 contaminant. A health advisory is an estimate of acceptable drinking water levels for a chemical substance based on health effects information; a health advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State, and local officials, and is non-regulatory.
- The levels represent health advisories for polyfluoroalkyl substances (PFAS) as UCMR3 contaminants.
- The US EPA has established a lifetime health advisory level (HAL) of 70 parts per trillion (ppt) for PFOA and PFOS combined. The New York State (NYS) proposed maximum contaminant level is 10 ppt for PFOA and 10 ppt for PFOS.
- 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 (0.2 mg/L). The action level for copper was not exceeded at any of the sites tested.

(11) 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.

(12) This level represents the highest locational running annual average (LRAA) calculated from data collected and the range of values.

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.
LRAA: Locational Running Annual Average; compliance is determined on a system-wide basis and the highest locational running annual average is reported along with the range of results.

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 2019, the Port Washington Water District monitored for additional contaminants under the EPA Unregulated Contaminant Monitoring Rules 3/4 (UCMR 3/4). The information collected under the UCMR 3/4 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 will be 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.
- 9:00-11:00 p.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 2019, the Port Washington Water District did not make any major improvements to the water system. System improvements planned for 2020 include the rehabilitation of the Ricks Well 7 and the replacement of the Soundview water mains in the District.

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.