2018 drinking water quality report

INC. VILLAGE OF OCEAN BEACH

PUBLIC WATER SUPPLY IDENTIFICATION NO. 5103280

ANNUAL WATER SUPPLY REPORT — **MAY 2019**

The Inc. Village of Ocean Beach is pleased to present this 2018 Water Quality Report. The report is required to be delivered to all residents of our Village in compliance with Federal and State regulations. We are happy to report that our water supply is in full compliance with all Federal, State and County regulations. Our constant goal is to provide you with a safe and dependable supply of drinking water every day. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. The Board of Trustees and the Village employees are committed to ensuring that you and your family receive the highest quality water.

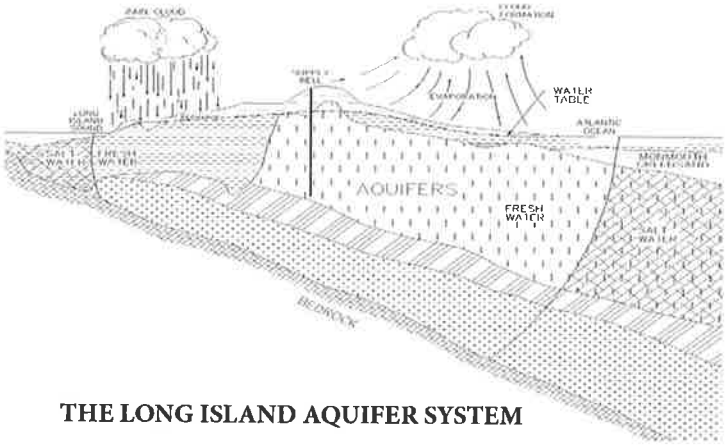
SOURCE OF OUR WATER

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 our 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. 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 source of water for the Village is groundwater pumped from 3 active wells located within the community that are drilled into the Magothy aquifer beneath Long Island, as shown on the figure below. The Village is also constructing a new supply well. Generally, the water quality of the aquifer is good to excellent, although there are localized areas of contamination. It should also be noted that the Village maintains auxiliary power at our well sites in order to continuously provide water to the community, even during emergency situations such as power outages.

The Inc. Village of Ocean Beach served 590 residential and commercial customers during 2018, with an average summertime population estimated at 4,500. The total amount of water withdrawn from the aquifer in 2018 was 73.2 million gallons.



THE LONG ISLAND AQUIFER SYSTEM

PROPOSED WATER SYSTEM IMPROVEMENTS

The Village has completed the construction of new supply well and pump station on the bay side of the Village. The well is now in service.

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2018, are available at the Inc. Village of Ocean Beach office located at Bay & Cottage Walks, Ocean Beach, New York.

We at the Inc. Village of Ocean Beach work around the clock to provide top quality water to every tap throughout the community. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water is safe and meets all Federal and State requirements. If you have any questions about this report or the Inc. Village of Ocean Beach, please contact Operator, Richard Schelling at (631) 583-7682 or the Suffolk County Department of Health Services at (631) 852-5810. We want our residents to be informed about our water system. If you want to learn more, please attend any of our regular scheduled Village board meetings – call Village office at (631) 583-5940.

The Inc. Village of Ocean Beach routinely monitors for different parameters and possible contaminants in your drinking water as required by Federal and State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some impurities. It's important to remember that the presence of these impurities does not necessarily pose a health risk. For more information on contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791 of www. epa.gov/safewater.

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 Cryptosporidum, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

The USEPA established a Lead and Copper Rule that required all public water suppliers to sample and test for lead and copper at the consumer's tap. The first testing was required in 1992. All results were excellent indicating that the Village's corrosion control treatment program was effective in preventing the leaching of lead and copper from your home's plumbing in to your drinking water. The same testing was conducted in 2016 with the same excellent results. The next testing program is scheduled to be completed in 2019.

WATER QUALITY

In accordance with State regulations, the Inc. Village of Ocean Beach routinely monitors your drinking water for numerous parameters. We test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes and synthetic organic contaminants. As listed in this newsletter, over 135 separate parameters are tested for in each of our wells. The table presented on page 3 depicts which parameters or contaminants were detected in the water supply. It should be noted that many of these parameters are naturally found in all Long Island drinking water and do not pose any adverse health affects.

WATER CONSERVATION MEASURES

In 2018, the Inc. Village of Ocean Beach continued to implement a water conservation program in order to minimize any unnecessary water use. Also, as part of the new well qualification, the Village handed out water saver kits. Water saver kits are still available at the Village office.

The Village will also be continuing with the Water Meter Replacement Program in 2019 that will include installing new water meters at every home and business.

Residents are urged to implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, modifying automatic lawn sprinklers to include rain sensors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits. Besides protecting our precious underground water supply, water conservation will produce a cost savings to the consumer in terms of both water and energy bills (hot water).

WATER TREATMENT

The Inc. Village of Ocean Beach provides treatment at all of its wells to improve the quality of the water pumped prior to distribution to the consumer. The pH of the pumped water is adjusted upward to reduce the corrosive action between the water and water mains and in-house plumbing by the addition of lime (calcium hydroxide). The Village currently adds a slight amount of chlorine to the water as a disinfection agent to prevent the growth of bacteria in the distribution system. In addition, a phosphate product, AQUAMAG, is added as an iron sequestering agent to minimize the discoloring of the water and staining of laundry, and to enhance corrosion control.

2018 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Lead & Copper							
Lead	No	July 2016	ND - ND ND[1]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	July 2016	ND - 0.3 0.24[1]	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Barium	No	08/27/18	0.013 - 0.014	mg/l	n/a	MCL = 2.0	Naturally occurring
Sodium	No	08/27/18	8.4 - 8.8	mg/l	n/a	No MCL[2]	Naturally occurring
Chloride	No	08/27/18	2.8 - 2.9	mg/l	n/a	MCL = 250	Naturally occurring
Iron	Yes[3]	08/27/18	ND - 550	ug/l	n/a	MCL = 300	Naturally occurring
Ammonia (Nitrogen)	No	11/28/18	ND - 1.1	mg/l	n/a	No MCL	Runoff from fertilizer and leaching from septic tanks and sewage
Nitrate	No	11/28/18	ND - 0.096	mg/l	n/a	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Volatile Organic Contaminants and Disinfection By-Products							
Total Trihalomethanes (THMS)	No	08/27/18	ND - 2.6	ug/l	0	MCL = 80	Disinfection By-Products
Total Haloacetic Acid (HAA5)	No	08/27/18	ND - 2.2	ug/l	0	MCL = 60	Disinfection By-Products
Radionuclides							
Gross Alpha	No	03/16/17	ND - 0.023	pCi/L	n/a	MCL = 15	Naturally occurring
Gross Beta	No	03/16/17	ND - 2.10	pCi/L	n/a	MCL = 50[4]	Naturally occurring
Radium 226 & 228[5]	No	03/16/17	ND - 0.174	pCi/L	n/a	MCL = 5	Naturally occurring
Uranium	No	03/16/17	ND - 0.012	ug/l	n/a	MCL = 30	Naturally occurring
Unregulated Contaminant Monitoring Rule[6]							
Hexavalent Chromium	No	10/10/18	ND - 0.04	ug/l	n/a	No MCL[6]	Natural deposits

Definitions:

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

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

Maximum Residual Disinfection Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Health Advisory (HA) - 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.

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

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

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

[1] - During 2016, we collected and analyzed 20 samples for lead and copper. The maximum result represents the 90th percentile. No sample exceeded the action level for copper and lead. Next testing is scheduled for 2019. 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 line sand home plumbing. The Inc. Village of Ocean Beach Water Department 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.

[2] - No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on high restricted sodium diets and 270 mg/l for those on moderate sodium diets.

[3] - Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron's effects on the taste, odor and color of the water.

[4] - The MCL is no longer an official regulatory level, but is still used as a trigger for EPA.

[5] -MCL for Radium is for Radium 226 and Radium 228 combined.

[6] - Federal Standard for Total Chromium is 100 ug/l. No standard has been established for Hexavelent Chromium yet.

The Inc. Village of Ocean Beach normally conducts over 1,000 water quality tests throughout the year, testing for over 135 different contaminants which have been undetected in our water supply including:

Arsenic	2,4,5-TP (Silvex)	Methylene Chloride
Cadmium	Dinoseb	Trans-1,2-Dichloroethene
Chromium	Dalapon	1,1-Dichloroethane
Fluoride	Picloram	cis-1,2-Dichloroethene
Mercury	Dicamba	2,2-Dichloropropane
Langlier Saturation Index	Pentachlorophenol	Bromochloromethane
Selenium	Hexachlorocyclopentadiene	1,1,1-Trichloroethane
Silver	bis(2-Ethylhexyl)adipate	Carbon Tetrachloride
1,2,4-Trimethylbenzene	bis(2-Ethylhexyl)phthalate	1,1-Dichloropropene
Color	Hexachlorobenzene	1,2-Dichloroethane
Turbidity	Benzo(A)Pyrene	Trichloroethene
Odor	Aldicarb Sulfone	1,2-Dichloropropane
Manganese	Aldicarbsulfoxide	Dibromomethane
Ammonia	Aldicarb	Trans-1,3-Dichloropropene
Nitrite	Total Aldicarbs	cis-1,3-Dichloropropene
Nitrate	Oxamyl	1,1,2-Trichloroethane
Chloride	Methomyl	Tetrachloroethene
Total Hardness	3-Hydroxycarbofuran	1,3-Dichloropropane
Total Alkalinity	Carbofuran	Chlorobenzene
pH	Carbaryl	1,1,1,2-Tetrachloroethane
Total Dissolved Solids	Glyphosate	Bromobenzene
Detergents (MBAS)	Diquat	1,1,2,2-Tetrachloroethane
Sulfate	Endothall	1,2,3-Trichloropropane
Free Cyanide	1,2-Dibromoethane (EDB)	2-Chlorotoluene
Antimony	1,2-Dibromo-3-Chl.Propane	4-Chlorotoluene
Beryllium	Dioxin	1,2-Dichlorobenzene
Calcium	Chloroacetic Acid	1,3-Dichlorobenzene
Magnesium	Bromoacetic Acid	1,4-Dichlorobenzene
Thallium	Dichloroacetic Acid	1,24-Trichlorobenzene
Perchlorate	Trichloroacetic Acid	Hexachlorobutadiene
Lindane	Dibromoacetic Acid	1,2,3-Trichlorobenzene
Heptachlor	Total Haloacetic Acid	Benzene
Aldrin	Chloroform	Toluene
Heptachloro Epoxide	Bromodichloromethane	Ethylbenzene
Dieldrin	Dibromochloromethane	M,P-Xylene
Endrin	Bromoform	O-Xylene
Methoxychlor	Methyl Tert.Butyl Ether (MTBE)	Styrene
Toxaphene	Sec-Butylbenzene	Isopropylbenzene (Cumene)
Chlordane	4-Isopropyltoluene (P-Cumene)	N-Propylbenzene
Total PCBs	N-Butylbenzene	1,3,5-Trimethylbenzene
Propachlor	Dichlorodifluoromethane	Tert-Butylbenzene
Alachlor	Chloromethane	Nickel
Simazine	Vinyl Chloride	Sulfate
Atrazine	Bromomethane	Zinc
Metolachlor	Chloroethane	
Metribuzin	Trichlorofluoromethane	
Butachlor	Chlorodifluoromethane	
2,4-D	1,1-Dichloroethene	

SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department, has completed a source water assessment for this system, based on available information. 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. Please refer to section "Water Quality" 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.

As mentioned before, our water is derived from 3 drilled wells. The source water assessment has rated all of the wells as having a low susceptibility to industrial solvents and nitrates.

A copy of the assessment, including a map of the assessment area, can be reviewed by contacting the Village Office.

NOTICE OF SAMPLING VIOLATIONS

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, we did not monitor or test for inorganic contaminants in Well No. 4 during the second quarter of the year and, therefore, cannot be sure of the quality of your drinking water during that time. Follow up sampling in 2018 indicated that Well No. 4 inorganic contaminant levels are below the drinking water standards for this parameter. The District has modified their procedures to prevent this situation from happening in the future.

Also the analysis of color exceeded the drinking water standard on samples collected at the sewage treatment plant in August and September 2018. Color has no health effects. In some instances, color may be objectionable to some people at as low as 5 units. Its presence is aesthetically objectionable and suggests that the water may need additional treatment.