R drinking water quality report

INC. VILLAGE OF OCEAN BEACH PUBLIC WATER SUPPLY IDENTIFICATION NO. 5103280

ANNUAL WATER SUPPLY REPORT

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MAY 2023

The Inc. Village of Ocean Beach is pleased to present this 2022 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.

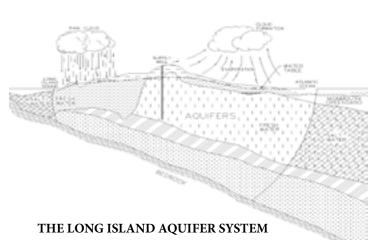
SOURCE OF OUR WATER

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 2022, with an average summertime population estimated at 4,500. The total amount of water withdrawn from the aquifer in 2022 was appproximately 66.8 million gallons.



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 2022, 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 with the exception of iron. 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 CONSERVATION MEASURES

In 2022, 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 is in the process of the Water Meter Replacement Program that included 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. 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 2022 with the same excellent results. The next testing program is scheduled to be completed in 2025.

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, synthetic organic contaminants and radiological 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 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.

2022 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	September 2022	ND -1.7 1.2 ⁽¹⁾	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	September 2022	ND - 23.0 0.14 ⁽¹⁾	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Barium	No	09/21/22	0.0073 - 0.0079	mg/l	2.0	MCL = 2.0	Discharge of drilling wastes
Fluoride	No	09/21/22	0.12	mg/l	n/a	MCL = 2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	No	09/21/22	7.6 - 51.7	mg/l	n/a	No MCL ⁽²⁾	Naturally occurring; road salt, water softners, animal waste
Color	No	09/21/22	ND - 8.0	Color Units	n/a	MCL = 15	Large quantities of organic chemicals, inadequate treat- ment, high disinfectant demand and the potential for production of excess amounts of disinfectant by-products such as triha- lomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.
Chloride	No	09/21/22	3.7 - 4.7	mg/l	n/a	MCL = 250	Weathering of soils, salt-bear- ing geological formations, deposition of salt spray, salt used for road de-icing, con- tributions from wastewaters and in coastal areas, intrusion of salty ocean water into fresh groundwater sources
Odor	No	09/21/22	ND - 1.0	Units	n/a	MCL = 3	
Iron	Yes ⁽³⁾	08/26/22	ND - 0.45	mg/l	n/a	MCL = 0.30	
Field pH	No	08/26/22	6.3 - 7.2	pH Units	n/a	N/A	Naturally occurring
Calcium Hardness	No	09/21/22	ND - 1.9	mg/l	n/a	No MCL	
Specific Conductance	No	09/21/22	54.2 - 57.9	umhos/cm	n/a	NO MCL	
Synthetic Organic Contaminants							
Benzo(a)pyrene	No	09/21/22	ND - 0.028	ug/l	n/a	MCL = 0.2	Leaching from linings of water storage tanks and distribution lines
Volatile Organic Contaminants and Disinfection By-Products							
Total Trihalomethanes (TTHM)	No	11/18/22	ND - 9.9	ug/l	0	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source wa- ter contains organic matter
Total Haloacetic Acids	No	8/26/21	ND - 1.1	ug/l	n/a	MCL = 60	By-product of drinking water chlorination needed to kill harmful organisms.

2022 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
Radionuclides							
Gross Alpha	No	03/16/17	ND - 0.023	pCi/L	0	MCL = 15	
Gross Beta	No	03/16/17	ND - 2.10	pCi/L	0	MCL = 50	
Radium 226 & 228 ⁽⁴⁾	No	03/16/17	ND - 0.174	pCi/L	0	MCL = 5	Naturally occurring
Uranium	No	03/16/17	ND - 0.012	ug/l	0	MCL = 30	

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. <u>Health</u> <u>Advisory (HA)</u> - 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.

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

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

Micromhos (umhos/cm) - The unit of measurement for conductivity.

Nephelometric Turbidity Units (ntu) - Intensity of light scattered at 90 degrees as a beam of light passes through a water sample

<u>Picocuries per liter (pCi/L)</u> - 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 2022, we collected and analyzed 20 samples for lead and copper. The maximum result represents the 90th percentile. One (1) copper sample exceeded the action level for copper and there were no samples that exceeded the action level for lead. Next testing is scheduled for 2025. 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 Hot line or at <u>www.epa.gov/safewater/lead</u>. (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 moder-

ate 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.

 $^{\scriptscriptstyle (4)}$ -MCL for Radium is for Radium 226 and Radium 228 combined.

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

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.