## Village of Pleasantville Annual Drinking Water Quality Report for 2014 80 Wheeler Avenue, Pleasantville, New York 10570 Public Water Supply ID # - 5903455

# **INTRODUCTION**

To comply with State and Federal regulations, the Village of Pleasantville Water Department, issues an annual 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. This report provides an overview of <u>last</u> year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. <u>Last year</u>, your tap water met all State drinking water standards.

If you have any questions about this water report, please contact the Superintendent of Public Works, at 914-769-1690. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. You can visit our website: www.pleasantville-ny.gov to find out when the meetings are held. The meetings can be seen on Cable T.V. channel 76.

## WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap and bottled) included 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

On September 30, 1998, the Village of Pleasantville went on line for water service with the Town of New Castle whose water is delivered from the Millwood Water Treatment Plant (MWTP). Pleasantville is part owner (15.83%) of the Millwood Water Treatment Plant. The New Castle Water System depends upon the New York City Aqueduct and Reservoir Systems for its entire raw water supply. New Castle's primary source is the Catskill Aqueduct System fed by the Ashokan reservoir, and its secondary source is the New Croton Aqueduct, fed by the Croton Reservoir System. The Catskill supply is the preferred supply for two reasons: the water quality is generally better and it is less costly to get it to the Millwood Water Treatment Plant. During **2014**, our system did not experience any restriction of our water source.

The NYS DOH has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for our water system. The Village of Pleasantville provides treatment through the Millwood Water Treatment Plant and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

We obtain water from the New York City water supply system. Water can either come from the Catskill watershed west of the Hudson River and/or from the Croton watershed in Putnam and Westchester Counties. The New York City Department of Environmental Protection implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas: the enforcement of strengthened Watershed Rules and Regulations; the acquisition and protection of watershed lands; and implementation partnership programs that target specific sources of pollution in the watersheds. Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for our water system.

The main water quality concerns associated with land cover in these watersheds are agriculture and residential land uses, which can contribute microbial contaminants, pesticides, and algae producing nutrients. There are also some concerns associated with wastewater but advanced treatments, which reduce contaminants, are in place for most of these discharges. Additionally, the presence of other discrete facilities such as landfills, chemical bulk storages, etc., could lead to some local impacts on water quality, but significant problems associated with these facilities are unlikely due to the size of the watershed and surveillance and management practices. In addition, the shallow nature of the Croton reservoirs, along with excess algae nutrients and the presence of wetlands in the watershed contribute to periods of elevated water color and disinfection by-product precursor levels. Additional information on the water quality and protection efforts in these New York City watersheds can be found at NYC DEP's web site <u>www.nyc.gov/dep/watershed</u>

# FACTS AND FIGURES

Our water system serves approximately 9,500 people with a total of 2,503 connections. During 2014, New Castle withdrew 1193.162 million gallons (MG) of raw water from the Catskill Aqueduct System and 0.000 MG from the Croton Aqueduct System. During 2014, New Castle supplied 317.669 MG to the Village of Pleasantville. The average daily taking was 870,323 gallons per day. The estimated unaccounted water in the Pleasantville water distribution system is 10%. This figure is based on the amount of water sold. Unaccounted for water includes water lost due to water main breaks, fire fighting, street cleaning, sewer flushing, hydrant flushing, leakage and stuck or slow meters. The average household served by the Pleasantville water district uses approximately 90,000 gallons of water per year. The annual charge for water per one thousand gallons delivered was \$8.66 for Village residents, \$11.07 for Town district residents and \$13.01 for Non-Village Residents (non-districted). A ready to serve charge for residents of \$57.00 to \$359.00 and for non-residents from \$71.00 to \$373.00 is also added to the quarterly bill. The amount charged depends on the size of the service line.

# **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, we routinely test our drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, fecal coliform and E. coli in addition to those inorganic and Volatile Organic contaminants. The results of various water analyses performed in 2014 can be found on Table 1 of this report. The State requires us to monitor for certain contaminants less than once per year because their concentrations are not expected to vary significantly from year to year. Some of our data, though representative, are more than one year old. It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Westchester County Department of Health at (914-813-5000) or write to the Westchester County Department of Health at 25 Moore Avenue, Mount Kisco, New York 10459.

## **RAW WATER TREATMENT**

The MWTP operating criteria adds the least amount of treatment chemicals necessary to be effective and then removes all of the chemical during the treatment process. The treatment regime has five steps: First, the raw water is mixed for one minute to disperse coagulation chemicals such as polyaluminum chloride, polymer and potassium permanganate. Second, the flocculators provide 30 minutes of staged, controlled mixing to entrap impurities such as clay, viruses, bacteria, protozoan cysts, minerals and algae into floc particles. Third, the Dissolved Air Flotation (DAF) process releases compressed air as microscopic bubbles into the bottom of the process stream and floats the impurity laden floc particles to the surface of the tanks where they are skimmed off. Clarified water leaves the bottom of the tank and flows into the Ozone Contact Chambers. Fourth, ozone is injected into the water. Ozone is the strongest commonly used oxidizing agent for disinfection and is the primary disinfectant at the plant. It is generated onsite, and by injecting it into the clarified water before filtration the amount of ozone used is minimized while any oxidized material can be removed by the filters. Finally, clarified ozonated water is filtered through three feet of sand and anthracite filter media into an underdrain collection system to remove any floc particles that may have escaped the DAF clarification. Typically, the plant physically removes 99.9% of the particulte matter and anything left in the water has been disinfected by the ozonation process. The water leaving the plant is usually 50 times cleaner than the New York State Standard.

## ENTRY POINT INTO THE DISTRIBUTION SYSTEM

The entry point into the New Castle distribution system is a 20" diameter high-pressure discharge line from the Pumping Station alongside the Millwood Treatment Plant. The Pumping Station has five electric pumps, four with a capacity of 2.5 MGD and one with a 3.9 MGD capacity. Here chlorine gas is injected to continue disinfection through the distribution system, fluoride is added for the prevention of dental caries, and caustic soda and orthophosphate are added for corrosion control to balance the pH level of the water. The corrosion control treatment reduces the chemical reaction of the water with copper pipe and lead solder in residents houses and minimizes the possibility of chemicals leaching into the water supply. This treatment has attained the federally mandated goal of reducing lead levels to less than 15 parts per billion in 90% of the samples tested.

# WATER ANALYSIS

In compliance with the Safe Drinking Water Act, the Village of Pleasantville water division samples drinking water from homes in our distribution system for the presence of lead and copper.

Since going on line with the Millwood Water Treatment Plant (MWTP), New Castle maintains a well-equipped laboratory capable of performing all process control tests needed to run the Millwood Water Treatment plant (MWTP). Additionally, all required bacteriological and chemical samples from the entry point and distribution system are taken for analysis and regulatory reporting to the Westchester County Department of Labs and Research in Valhalla. The results of various water analyses performed in 2014 can be seen in *Table 1*. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because their concentrations are not expected to vary significantly from year to year. There is a Key included at the bottom of *Table 1*. The following definitions are included in order to help the consumer understand the contaminant data:

• 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 using the best available technology.

• 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.

The MWTP is supervised by a Grade1-A, New York State licensed Water Treatment operator and staffed 24 hours per day, seven days per week, with New York State licensed Grade 2-A Water Treatment Plant Operators. They continually monitor the computerized process control system at the Plant, adjust pumps and chemical feed rates, and collect and analyze samples as necessary.

#### WATER DIVISION RESPONSIBILITIES

The Water Division of the Department of Public Works ensures Pleasantville's compliance with all federal and state monitoring and reporting requirements. The division maintains and repairs the water mains, fire hydrants, pump station and all residential water meters. In 2014, the Water Division repaired 9 main breaks, responded to 302 work orders, 474 Underground Code mark outs, 5 service line replacements, 93 final reads, replaced 1 hydrant, and replaced 350 meters and 5 radios. The water division also monitors the Cross Connection program mandated by the Westchester County Health Department. District water meters are tested annually.

#### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

The Village of Pleasantville's Department of Public Works staff assigned to water ensures Pleasantville's compliance with all Federal and State monitoring and reporting requirements. All required bacteriological and chemical samples are taken for analysis and regulatory reporting to the Westchester County Department of Laboratory and Research in Valhalla.

## **CRYPTOSPORIDIOSIS AND GIARDIASIS**

Cryptosporidium and Giardia are microbial pathogens found in surface water and groundwater under the influence of surface water. During 2014, we were not required to monitor for these organisms. Furthermore, our water passes through processes at the Millwood Water Treatment Plant and is very aggressively treated. (See the aforementioned description of these steps found in the section entitled **Where does our water come from?** Cryptosporidiosis can be very serious for people with weakened immune systems such as people undergoing chemotherapy, dialysis or transplant patients and people with Crohn's disease or HIV infection. People with weakened immune systems should discuss with their health care providers the need to possibly take extra precautions such as boiling water, using bottled water (certified) or using a specially approved home filter. Anyone who fears that he or she may have Cryptoporidiois or Giardiasis should contact their healthcare provider immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Cryptosporidium and Giardia must be ingested to cause disease and it may spread through other means other than drinking water.

Ozone is **the most effective disinfectant** for Cryptosporidium and Giardia and Pleasantville water is both ozonated and filtered to minimize any health risk from these organisms. However, many neighboring community systems are not as aggressively treated or may be "avoiding filtration." Individual's drinking water that has not been treated or filtered may be at greater risk from Cryptosporidium or Giardia.

#### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800) 426-4791.

#### **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of health requires that we monitor fluoride levels daily. During 2014, monitoring showed fluoride levels in your water were in the optimal range 99.9% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

#### WATER CONSERVATION

Water is a vital resource. The need to conserve water during times of drought is obvious to all. It is just as important to use water wisely when the supply is plentiful. Careful use of this resource can result in less money spent on water, energy and wastewater treatment. Some common sense measures you can take to conserve water include; repair leaky pipes and faucets check toilet tanks for leaks and fix them immediately; wash clothes in full loads only; turn off the tap when brushing your teeth or shaving; run the dishwasher only when full; install low flow showerheads, the 2 gallon per minute type; flush toilet for sanitary waste only, do not use it as a wastebasket; place a bottle of tap water in the refrigerator to avoid loss water when running the tap for a cool drink; place mulch around trees and plants.

#### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

# As the State regulations require, we routinely test your drinking water for numerous contaminants. Following is a list of those that were <u>not detected in 2014:</u>

Organic contaminants that were tested for and not detected in the source water include 3-Hydroxycarbofuran, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,3,7,8-TCDD (Dioxin), Diquat, Endothall, Glyphosate, 2,4,5-T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl) adipate, bis(2-Ethylhexyl) phthalate, Hexachlorobenzene, Hexachlorocyclopentadiene, Simazine, 1,1,1,2tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1dichloroethene, 1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-1.2-dichlorobenzene, trimethylbenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1.3.5-trimethylbenzene. 1.3dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-butanone, 2-chlorotoluene, 4chlorotoluene, Benzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlobutadiene, Isopropylbenzene, Methyl iso-butyl ketone, Methyl tert-butyl ether (MTBE), Methylene Chloride, N-butylbenzene, N-propylbenzene, Naphthalene, O-xylene, P & M-xylene, P-isopropyltoluene, SEC-butylbenzene, TERT-butvlbenzene. Tetrachloroethene. Toluene. trans-1,2-dichloroethene, trans-1,3-dichloropropene, Stvrene. Trichloroethene, Trichlorofluoromethane, and Vinyl chloride, Perchlorate, DCPA di-acid, 2,4-dinitrotoluene, 2,6dinnitrotoluene, 4,4-DDE, Acetochlor, EPTC, Molinate, Terbacil, MTBE, nitrobenzene.

#### WHAT DOES THIS INFORMATION MEAN?

We have learned through our testing that some contaminants have been detected: however, these contaminants were detected below the New York State requirements. All systems are required to provide the following educational information on lead in drinking water even though our water did not exceed the action level. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at you home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of Pleasantville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

**FOR FURTHER INFORMATION**: To report any problems with your water or to request additional information please call (914) 239-8022, Mon-Friday 7 a.m.-3 p.m. For emergency water problems after these hours call the Pleasantville Police Department at 769-1500. Further information can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4761.