

Village of Pleasantville
Annual Drinking Water Quality Report for 2008
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 last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. Last year, your tap water met all State drinking water standards.

If you have any questions about this water report, please contact Stephen Johnson, Superintendent of Public Works, at 914-769-3883. 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 78.

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 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 2008, 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 www.nyc.gov/dep/watershed

FACTS AND FIGURES

Our water system serves approximately 9,500 people with a total of 2,485 connections. During 2008, New Castle withdrew 1160.958 million gallons (MG) of raw water from the Catskill Aqueduct System and 10.759 MG from the Croton Aqueduct System. During 2008, New Castle supplied 324.40 MG to the Village of Pleasantville. The average daily taking was 886,338 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 \$6.81 for Village residents, \$8.71 for Town district residents and \$10.24

for Non-Village Residents (non-districted). A ready to serve charge of \$30.70 to \$173.21 is also added every billing quarter. The amount charge 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 2008 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.

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 145 Huguenot Street, New Rochelle, New York 10801.

The New York State Department of Health sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however may be a result of a problem with water treatment of the pipes on the water tanks which distribute the water, and indicates that the water may be contaminated with organisms that may cause disease. The New York State Department of Health has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than one of the samples collected during a month can contain these bacteria. Drinking water that meets this standard is usually not associated with a health risk from disease-causing bacteria.

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, protozoa crystals, 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 particulate 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

All required bacteriological and chemical samples from the entry point and distribution system were taken for analysis and regulatory reporting to the Westchester County Department of Labs and Research in Valhalla.

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. In October, 1999, after receiving water from New Castle's Water Treatment Plant which provides corrosive control Pleasantville met New York State Health Department mandated goals of reducing lead levels to less than 15 parts per billion in more than 90 percent of samples taken.

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 2008 can be 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 MCLs 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 Grade I-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 2008, the Water Division repaired 20 main breaks and leaks, repaired 13 hydrants, installed no new fire hydrants, installed 77 water meters, tested 8 residential meters, installed 511 water meter radio frequencies, made 1 new water tap, responded to 262 service requests and 377 Code 53 mark outs. The water division also flushed 620 hydrants.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Water Division of Pleasantville’s Department of Public Works 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 2008, as part of routine sampling, NYC collected 52 samples from the Catskill drinking water supply and analyzed for Cryptosporidium oocysts and Giardia cysts. Of these samples, 10 (Catskill) and 7 (Croton) were confirmed positive for Crypto and 46 (Catskill) and 26 (Croton) were confirmed positive for Giardia. Therefore, the testing indicates the presence of these organisms in our raw, untreated water. However, 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 Cryptosporidiosis or Giardiasis should contact their healthcare provider immediately. 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. For additional information on Cryptosporidiosis or Giardiasis, please call the Westchester County Department of Health at (914) 813-5000 or write the Westchester County Department of Health, 145 Huguenot Street, New Rochelle, New York 10801.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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

INFORMATION OF 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 0.8 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 2008, monitoring showed fluoride levels in your water were in the optimal range 99.2% 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; water your lawn in the early morning to reduce water loss by evaporation; place mulch around trees and plants to lessen evaporation.

As the State regulations require, we routinely test your drinking water for numerous contaminants. Following is a list of those that were not detected in 2008:

(The bacteria E. coli (associated with human and animal fecal waste) was not found in the distribution system. In addition, we monitored entry point samples for inorganic contaminants that were not detected. These include color, cyanide, ammonia, nitrite, antimony, arsenic, beryllium, mercury, iron, nickel, lead, cobalt, copper, aluminum, thallium, selenium, cadmium, chromium, silver and zinc. 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, 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 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-butanone, 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, 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, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, and Vinyl chloride, Perchlorate, DCPA di-acid, 2,4-dinitrotoluene, 2,6-dinitrotoluene, 4,4-DDE, Acetochlor, EPTC, Molinate, Terbacil, MTBE, nitrobenzene, Strontium 90, and Tritium. Asbestos also a non-detect.

It should be noted that all drinking water, including bottled drinking water, might 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.

What Does This Information Mean?

As you can see by the Table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the NY State requirements. All systems are required to provide the following educational information on lead in drinking water even though our water met standards:

Lead. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and to flush your tap for 30 seconds to 2 minutes before using the tap water. Additional information is available from the Safe Drinking water hotline (800-426-4791)

CAPITAL AND SYSTEM IMPROVEMENTS – During 2008 a contractor installed a Chemical Spill Containment System at the Millwood WTP.

FOR FURTHER INFORMATION: To report any problems with your water or to request additional information please call (914) 769-3883, 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 EPS's Safe Drinking Water Hotline at 1-800-426-4761.

Village of Pleasantville Water System

2008 WATER ANALYSIS

TABLE OF DETECTED CONTAMINANTS

Contaminants (units)	Violation Yes or No	Date of Sample	MCL	New Castle Result 2008	MCLG	Major Sources in Drinking Water
Turbidity (at treatment plant)	No	Every 4 hours	0.3 NTU	0.039 NTU	n/a	Soil runoff, Turbidity is a measurement of the cloudiness of the water.
Turbidity (in distribution system)	No	1 per Day	5.0 NTU	0.059 NTU	n/a	Soil runoff, Turbidity is a measurement of the cloudiness of the water.
Inorganic Contaminants						
Fluoride (ppm)	No	Every 4 hours	2.2	1.05 ppm	n/a	Erosion of natural deposits; Water additive which promotes good teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	No	10/3/2008	10	0.137 ppm	10	Runoff from fertilizer use Leaching from septic tanks; Erosion of natural deposits
Barium	No	10/3/2008	2000 ug/L	8.4 ug/L	2000	Erosion of natural deposits.
Chloride	No	10/3/2008	250 mg/L	10.4 mg/L	n/a	Erosion of natural deposits; Road salt
Manganese	No	10/3/2008	300 ug/L	5.7 ug/L	n/a	Erosion of natural deposits.
Zinc	No	10/3/2008	5000 ug/L	2.4 ug/L	n/a	Erosion of natural deposits.
Sodium (ppm)	No	10/3/2008	N/A Levels are within HD Guidelines	8.95 ppm		Water containing more than 20 mg/L of sodium should not be used for drinking by people who are on severely restricted diets. L/T 250 for moderate diets. Road Salt and erosion of natural deposits.
Gross Alpha (pCi/L)	No	6/7/2004	15	0.1 pCi/L	n/a	Decay of natural deposits, or man-made emissions.
Gross Beta (pCi/L)	No	6/7/2004	50	0.5 pCi/L	n/a	Decay of natural deposits, or man-made emissions.
Disinfection Byproducts						
TTHMs [Total - Trihalomethanes] (ppb)	No	Quarterly	80 ug/L	11.47 ug/L	n/a	By-product of drinking water chlorination.
Haloacetic acids	No	Quarterly	60 ug/L	6.58 ug/L	n/a	By-product of drinking water chlorination.
Chlorine Residual (entry Point)	No	Every 4 hours	4.0mg/l	1.130 mg/L	n/a	By-product of drinking water chlorination.
Chlorine Residual (distribution system)	No	3 x per Day	4 mg/L	0.804 mg/L	n/a	By-product of drinking water chlorination.
Miscellaneous Analytes						
Hardness (mg/L)	No	10/3/2008	n/a	17 mg/L	n/a	A combination of mineral constituents such as calcium and magnesium salts. 0-45 = soft water, 46-90 = soft to moderately hard, 91-130 = moderately hard to hard.
Alkalinity (mg/L)	No	10/3/2008	n/a	15.2 mg/L	n/a	A measure of the alkaline constituents of water, mostly bicarbonates.
pH (units)	No	10/3/2008	n/a	7.47 units	n/a	A measure of the intensity of the basic or acidic condition of a liquid. Neutral water is a pH of 7.
Total Dissolved Solids	No	10/3/2008	250 mg/L	32.8 mg/L	n/a	A measure of dissolved solids in water.
Contaminant	Violation Yes or No	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	Action Level	Likely Sources of Contamination
Lead	No	June-Sept 2006	3.9 ¹ mrl 9.2	ug/L	15.0 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	June-Sept 2006	32.2 ¹ 0.79-35.3	ug/L	1300 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits.

¹ & ² - Levels presented represent the 90th percentile of the 20 sites tested. A percentile is a value on a scale of 100 that indicates the percent of the distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead or copper values detected in our water system. In this case, 20 samples were collected in our water system and the 90th percentile value was the third highest value (3.9 ug/L for lead and 35.3 ug/L for copper). The action level for lead (15 ug/L) was not exceeded and the action level (1300 ug/L) for copper was not exceeded in 2006 The Village is on reduced monitoring for lead and copper which requires testing on a three year level.

LOQ = Limits Of Quantitation **pCi/L** = picocuries per liter (a measure of radioactivity) **NTU** = nephelometric turbidity units **mrl** minimum reporting level
MCLG = maximum contaminant goal **PPM** = parts per million **ug/L** = Microgram per liter **mg/L** = milligram per liter **AL** = action level
PPB = parts per billion or micrograms per liter (ug/L) **L/T** = Less Than **MCL** = maximum contaminant level **TT** = treatment techniques
MCL = The highest level of a contaminant that is allowed in drinking water, and are set as close to the MCLGs as feasible.
MCLG = The level of a contaminant in drinking water below which there is no known or expected risk to health.