VILLAGE OF PELHAM
ANNUAL WATER QUALITY REPORT FOR 2009

Your water meets or exceeds state and federal regulations for safe drinking water

Pelham Public Water Supply (PWS # 5911901)

AND

Spring 2010 Hydrant Flushing Notice

Village of Pelham
195 Sparks Avenue
Pelham, New York 10803

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Annual Drinking Water Quality Report for Calendar Year 2009
Village of Pelham Public Water Supply
195 Sparks Avenue, Pelham, NY 10803
Public Water Supply ID# 5911901

INTRODUCTION

To comply with State regulations, the Village of Pelham Public Water Supply (hereinafter the "Pelham P.W.S.") annually issues a report describing our drinking water quality. 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. This report provides an overview of last year's water quality. Included are details of 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 Water System Administrator Robert Yamuder or Debbie DelGrosso at 914-738-2015 for information. If you want to learn more, please attend any of our regularly scheduled village board meetings. We want you to be informed about your drinking water. If you want to learn more from us, please write to the Administrator's Office, Village Hall, 195 Sparks Ave., Pelham, New York, 10803, for other resources, or if you would like, we would be happy to have a representative meet with you.

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 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.

Our water system serves approximately one quarter of the Village of Pelham – about 1,600 residents – through 535 service connections. During 2009, the Pelham P.W.S. purchased approximately 109,369 CCF, or hundreds of cubic feet of water from United Water. Our water source is the New York City Water Supply System, a surface water system. About ninety-two percent (92%) of our water comes from the Catskills, and the remaining eight percent (8%) comes from the Delaware and Croton systems, which are owned and operated by the NYC D.E.P. In 2008, United Water expanded its draw from the Catskill system, to eliminate using the Croton system water. The water from NYC DEP is conveyed to the Pelham P.W.S. through United Water's system. United Water New Rochelle treats this water through chlorination to eliminate bacterial and minimize microbiological contamination, zinc polyphosphate to reduce corrosion of metal piping and plumbing, and liquid soda ash and caustic soda reduce the acidity of water to make it less corrosive. Our water is not filtered.

Pelham's water from the Delaware and Croton systems are primarily susceptible to agricultural and residential land uses, which can include microbiological contaminants, pesticides, and nutrients from runoff and fertilizers that contribute to algae growth. There are also concerns associated with facilities such as landfills, chemical bulk storages, etc, and waste water draining into the Water Systems that are the source for our water, but control and treatment processes in place are designed to minimize contaminants to acceptable state and federal standards.

The NYS DOH has evaluated water supplies statewide to determine their susceptibility to potential contamination under the Source Water Assessment Program (SWAP) and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information. The reports only estimate the potential for source water contamination. Elevated ratings do not mean that source water contamination has occurred or ever will occur for our water supply (ies) which are owned and operated by the NYC DEP.

STATE DRINKING WATER FILTRATION REQUIREMENTS

The New York State Department of Health (NYSDOH) has determined that the New York City Croton Aqueduct water source requires filtration. In 2009, United Water used the Croton Aqueduct water source for approximately 8 percent of our supply. We obtained the remaining 92 percent of our supply from the New York City Catskill and Delaware sources, which do not require filtration.

Although the Croton water source is not filtered, the NYSDOH has determined that operating this supply for the interm period while the Delaware Interconnection Project was being constructed posed no unreasonable health risk, due to the carefully applied and monitored disinfection process. Inadequately treated water may contain disease causing bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

As of December 2009, the Delaware Interconnection Project was completed and fully operational. Subsequent to this date United Water is now providing 100 percent of its water to customers via the Delaware and Catskill sources, and no longer utilizing the Croton Aqueduct as a routine supply.

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, turbidity, inorganic compounds, lead, copper, Haloacetic Acids (HAAs), Trihalomethanes, and asbestos. The table presented below depicts which compounds were detected in your drinking water. 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.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain small, or trace, amounts of some contaminants. The presence of contaminants does not necessarily indicate 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 Health Dept. at 914-813-5000.

Definitions:

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

CU: Color Unit

<LOQ: *Less than the Limits of Quantification.*

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 Disinfectant 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 Disinfectant 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 contamination.

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

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

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Drinking Water Quality Table

The water quality table shows how the quality of your drinking water in year 2009 compared to the standards set by the US EPA and the NYS DOH. When standards differed, the more stringent standard was used for the MCL.

The following contaminants were tested for by the Village of Pelham or United Water:

The Pelham P.W.S. is the source for the following water test sampling and results:

Chemical/Element	Sample Date	Violation Yes/No	Lev. Detected (Avg/Range)	Unit Meas.	MCL	MCL G	**Likely Source of Contamination**
Asbestos (MCL)	Oct 2003	No	ND=not detected	ND	0	0	Natural and manmade sources.
Chlorine	Jan.-Dec. 2009	No	Avg. 0.37 ppm Range: 0.05-0.70	ppm=parts per million	4	4	Disinfection process.
Copper (MCL 1.3 AL) * See Note 2.	July 2009	No	Ranges: 47.80 - 227.00 90th percentile: 157	ppm =parts per million	1.3 ppm	1.3 ppm	Corrosion of household plumbing, water connections and pipes.
Lead (MCL 15 AL) * See Note 3.	July 2009	Yes	Ranges: <LOQ-185.0 90th %tile: 43.6	ppb = parts per billion	15 ppb AL	0	Corrosion of plumbing, soldered connections and service pipes.
Turbidity (MCL 5 NTU) * See Note 1.	Jan-Dec 2009	No	Avg.: 0.78 Range: .47 – 1.39	NTU	5	NA	Soil runoff, or construction disturbing sediment in the pipes.
Haloacetic Acids – HAAs	*See note 6	No	Avg.: 35.3 Range:30.2 – 38.4	ug/L	60	NA	By-product of chlorination
Trihalomethanes – THMs	*See note 6	No	Avg: 52.2 Range: 45.6 – 60.8	ug/L	80	NA	By-product of water chlorination/disinfection.

United Water is the source for the following water test sampling and results:

Chemical/Element	Sample Date	Violation Yes/No	Lev. Detected (Avg/Range)	Unit Meas.	MCL	MCLG	**Likely Source of Contamination**
Alpha particle (2004 data) radioactivity (MCL 15)	Dec. 2004	No	ND - 0.4	pCi/l	15	0	Decay of natural deposits and man made activities
Barium (MCL 2 ppm) ('04)	June-Sept 2009	No	Range: 0.02- 0.04	ppm	2	2	Naturally occurring
Beta Particle radio-activity (MCL 50 pci/L) *Note 4. ('04)	Dec 2004	No	Range: 0.3 – 3.4	pCi/l	50	0	Decay of natural deposits and man made emissions
Chloride (MCL 250 ppm)	June-Sept 2009	No	12-88	ppm	250	NA	Naturally occurring
Color (MCL 15 CU)	June-Sept 2009	No	3-15	CU	15	NA	Naturally occurring
Combined Radium (2004)	June-Sept 2009	No	0.19 – 0.76	pCi/l	5	0	Naturally occurring
Fluoride (MCL 2.2 ppm)	June-Sept 2009	No	Range: ND-1.0	ppm	2.2	2.2	Water additive for strong teeth

Iron (MCL 300 ppb)	June-Sept 2009	No	Range: 0.03-0.110	ppb	300	NA	Naturally occurring element
Manganese (300 ppb)	June-Sept 2009	No	Range: 0.003 – 0.011	ppb	300	NA	Naturally occurring
Nitrate (MCL 10 ppm)	June-Sept 2009	No	Range: .15 - .60	ppm	10	10	Fertilizer use, natural deposits
Odor (TON) (mcl 3)	June-Sept 2009	No	Range 0 - 1.00	TON	3	NA	Naturally occurring
Sodium: (no MCL) * See Note 5.1 and 5.2.	June-Sept 2009	No	5 – 33.00	ppm	No limit	NA	Naturally occurring and byproduct of human activities, road salt, etc.

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of the filtration system. Our highest turbidity measurement for the year occurred at Stiefvater Realty on 12/08/2009 (1.39 NTU). State regulations require that turbidity must always be below 5 NTU. All other turbidity measurements through the year are between approximately .47 and 1.39.

2 – The level presented represents the 90th percentile of the 10 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 our water system. In this case, 10 samples were collected at our water system and the 90th percentile value was the 157 ppm value. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the 10 samples collected. The action level for lead was exceeded at 3 of the 10 sites tested, where the action level is 15 micrograms per liter. The homeowners were contacted, and advised to take proper precautions, including checking for lead pipes or service lines.

4 – For Beta Particle Radioactivity, NYS considers 50 pCi/L the level of concern for beta particles detected.

5.1 – Regarding Sodium – water containing more than 20 ppm of sodium should be avoided for drinking by people on severely restricted sodium diets.

5.2 – Regarding Sodium – water containing more than 270 ppm of sodium should be avoided for drinking by people on moderately restricted sodium diets.

6. HAA and THM were tested quarterly March09, June09, September 09 and December 2009.

HAA5 – haloacetic acids (mono-, di- & tri-chloroacetic acids; and monobromo- & dibromo-acetic acids).
THM- trihalomethanes (chloroform, bromodichloromethane,dibromochloromethane, bromoform).
Total C12-total chlorine residual
Where a range is given, the highest detected level is the maximum value given in the range.

WHAT DOES THIS INFORMATION MEAN? IS OUR SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below NYS DOH and US EPA requirements. Although we experienced only one tests that exceeded MCLs, we think you as our customers should be notified and advised of the following information on lead in drinking water: 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 your 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 Pelham Water Supply 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.

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. Fluoride is added to your water by the NYCDEP before it is delivered to us. 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 United Water New Rochelle monitor fluoride levels on a daily basis. During 2009, monitoring showed fluoride levels in your water were in the optimal range 85 % of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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 your health care provider for advice.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

BACKFLOW PREVENTION DEVICE PROGRAM

Within the past few years, the Village received a violation for non-compliance with the County and State requirements for backflow-prevention devices to be in place and operational, and tested on a regular basis. These requirements state that certain business operations – like doctor's offices, gas stations, restaurants, salons, and other sources of potential water contamination – must have backflow prevention devices to prevent the entry of bacteriological or chemical contaminants into the water supply. If you own and/or operate a business such as this, you are required to install and maintain a proper backflow prevention device.

Failure to comply with these regulations could result in the issuance of violations, fines, penalties, and having your business's water shut off until you are in compliance.

If you have questions about this matter, please call Water System Administrator Robert Yamuder at 914-738-2015.

INFORMATION ON CRYPTOSPORIDIUM

A Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. The Village of Pelham does not monitor for Cryptosporidium. Though filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

A Giardia cyst is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. The Village of Pelham does not monitor for Giardia cysts. Giardia is removed/inactivated through a combination of filtration and disinfection, or by disinfection. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where handwashing practices are poor.

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).

HYDRANT TESTING AND FLUSHING PROGRAM IN 2009

Although there is no health hazard caused by stirring up accumulated silt in our drinking water, residents should be aware that the Village continued our fire hydrant flushing program in late Spring of 2009, and we plan the same for Spring, 2010. We will continue in the future on a once-a-year hydrant flushing schedule. While many people may experience difficulties with water discoloration, that problem should be eliminated with our regular hydrant flushing schedule. We apologize for any inconvenience.

WATER CONSERVATION:

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some costs associated with these necessities of life. It also lowers your bills.
- Saving water reduces the costs of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, and helps avoid severe water use restrictions so essential water demands and fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household uses, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and only run it when it is loaded to full capacity.
- Turn off the tap when you brush your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an otherwise invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Thank you for allowing us to continue to provide your family with quality drinking water this year. Residents should be aware that the water pipes that convey the water in the Village of Pelham's water supply were constructed to the highest standards, and still serve you well today. Virtually all our street water mains were originally constructed using cement-lined iron pipes, which provide the highest quality of water, as well as the longest life of the water line.

In order to maintain a safe and dependable water supply we may sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

We ask that all our customers help us protect our water sources, which are vital to our community. Please call our office if you have questions. This AWQR will also be posted on our Village website – **www.Pelhamgov.com** .

VILLAGE OF PELHAM
Public Water Supply 5911901
Notice to Water System users

Hydrant Flushing Program – Spring, 2010

The Village of Pelham Public Water Supply will begin our annual hydrant-flushing program on **Tuesday, June 1, 2010**. Flushing will be performed Tuesday through Friday between the hours of 10:00 p.m. and 12:00 midnight. The flushing program is expected to take one week to complete. Flushing is expected to be completed on Ancon Avenue sometime on or before Friday evening, June 4, 2010.

The Pelham Public Water Supply is bounded by the Hutchinson River Parkway, Colonial Avenue (including some users in Pelham Manor along Colonial Avenue), Ancon Avenue, and First Street south of the Metro North Railroad.

The Water Department will begin the flushing program in the western neighborhoods and hydrants along Wolfs Lane and in the business district, and move east through the system, towards New Rochelle.

As the hydrant-flushing program nears your neighborhood, you may notice a discoloration of your water, which is primarily disturbed silt and sediment. This is temporary and poses no health risk. Simply run your water for a short time until it clears.

Do not do any laundry until you are sure your water is clear. If discoloration persists, call the Village Administrator's Office at 738-2015 between the hours of 8 a.m. and 6 p.m., or send an e-mail to info@pelhamgov.com.

We apologize for any inconvenience this hydrant-flushing program may cause. This procedure is necessary to ensure the continued high quality and clarity of the water we supply to you as mandated by the New York State Department of Health. We appreciate your cooperation and understanding during this operation.

Robert A. Yamuder
Village Administrator
Water System Administrator