

ANNUAL DRINKING WATER QUALITY REPORT FOR 2008 BRIARCLIFF MANOR WATER DISTRICT

INTRODUCTION

In compliance with State regulations, the Briarcliff Manor Water System (Public Water Supply ID Number 5903420) annually issues a report describing the quality of the drinking water provided to Briarcliff Manor water customers. The purpose of this report is to raise your understanding of the water provided to you by the Village and awareness of the need to protect the Village's drinking water sources. Last year, the Village conducted tests for over 140 contaminants. Twenty two (22) of those contaminants were detected, and testing found that one of these contaminants was at a level higher than permitted by the State. A discussion of these conditions is provided on Page 6 of this report. This report provides an overview of last year's water quality. Included are details about where the water comes from, what it contains, and how it compares to State standards.

You can obtain additional information on the water system as well as learn of opportunities for public participation regarding water related issues at Village Board of Trustees Meetings and on the Village's web site, www.briarcliffmanor.org. If you have any questions about this report or concerning your drinking water, please contact the Department of Public Works at 941-9105.

WHERE DOES OUR WATER COME FROM?

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. The water can also 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 Health Department and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department and the FDA have regulations that establish limits for contaminants in bottled water which must provide the same protection for public health.

Briarcliff Manor's normal source of water is New York City's Catskill/Delaware system which consists of reservoirs located in Delaware, Greene, Schoharie, Sullivan and Ulster counties, west of the Hudson River. The Catskill/Delaware system is the major source of water for New York City. The supply to Briarcliff Manor is provided from the Lower Catskill Aqueduct through a connection from the Village of Sleepy Hollow water system.

Prior to distribution to water customers, Lower Catskill water is treated with chlorine, sodium hydroxide, orthophosphate and fluoride. Chlorine is used to meet the New York State Sanitary Code and Federal Safe Drinking Water Act disinfection requirements. Sodium hydroxide and orthophosphate are added to reduce the corrosion of in-home plumbing. A small amount of fluoride (1 part per million [ppm]) is added to help prevent tooth decay.

When, due to maintenance, supply from the Lower Catskill Aqueduct is not available or during the summer months when water demands exceed the current supply capacity of this source, Briarcliff Manor's water supply is augmented by water from the Croton Reservoir.

When the Village is utilizing the Croton Supply, a food grade, phosphate based water treatment chemical is added to the water to reduce the severity of discolored water, stained plumbing fixtures and discoloration of laundry. Chlorine is also used to meet the New York State Sanitary Code and Federal Safe Drinking Water Act disinfection requirements.

SOURCE WATER ASSESSMENT

The following discussion of source water quality from the New York City water supply system was prepared by the New York State Department of Health.

This Public Water Supply System obtains water from the New York City water supply system. Water either comes from the Catskill/Delaware 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 (NYC DEP) implements a series of programs to evaluate and protect the 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 land; and an implementation partnership program that targets specific sources of pollution in the watershed. Due to these intense efforts, the Source Water Assessment Program (SWAP) methodology applied to the rest of the State would not apply for this Public Water Supply. Additionally, information on water quality and protection efforts in these New York City watersheds can be found at the DEP's website www.nyc.gov/html/dep/html/watershed_protection.

This Public water system obtains its water from both the Catskill/Delaware watershed west of the Hudson and the Croton watershed in Putnam and Westchester counties. The main water quality concern associated with land cover in these watersheds are agricultural and residential land use which can contribute microbial contaminants, pesticides and algae producing nutrients. There are also some concerns associated with waste water, but advanced treatment which reduce contaminants are in place for most of these discharges. Additionally, the presence of other discrete facilities such as landfills, chemical bulk storage, etc. could lead to some local impact 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 Reservoir, along with excess algae nutrients and the presence of wetlands in the watershed, contribute to periods of elevated water color and disinfection by-products precursor levels.

FACTS AND FIGURES

The Briarcliff Manor water system serves 8,800 people in Briarcliff Manor and portions of the Towns of Mount Pleasant and Ossining through approximately 2,700 service connections. In 2008, the average amount of water treated and supplied to customers is on a daily basis 1.1 million gallons per day. The highest single day was 3.3 million gallons per day. In 2008, water customers residing in the Village of Briarcliff Manor were charged \$71.19 per 1,000 cubic feet of water. The annual average water charge per residential user is approximately \$1,000 per year.

UNACCOUNTED FOR WATER

Unaccounted for water is the difference between the volume of water pumped into the system and the volume registered by customer meters. For 2008, a company was hired to perform a Leak Detection Survey of the water system. The Survey found several leaks which were repaired and absent the water loss due to individual water main breaks, the water used by the Fire Department (for fire fighting, training, drills and tank storage replacement), by the Briarcliff Manor Water Department for hydrant flushing, maintenance and repair and routine pipe leakage common for the age and running length of this system contributed to an unaccounted water usage of 19%. The

Village's goal is to maintain unaccounted for water to within the 10 to 20 percent range suggested by the American Water Works Association (AWWA).

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, the Village routinely tests your drinking water for numerous contaminants. These contaminants tested for include: turbidity, lead and copper, inorganic compounds, nitrate, nitrite, total trihalomethanes, synthetic organic compounds, volatile organic compounds, haloacetic acids and radiological. The table presented below depicts which compounds were detected in your drinking water. Additionally, New York City conducts an extensive testing program of Catskill Aqueduct water. The results of New York City's sampling program are available at www.ci.nyc.ny.us/dep.

Water quality is monitored daily by the Village's Department of Public Works. Bacteriological and chemical samples are collected as required by the State Sanitary Code and analyzed by a New York State approved environmental laboratory.

It should be noted that all drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 Department at (914) 813-5100.

Explanation of Water Quality Data

This report is based on most recent tests conducted in the Briarcliff Manor Water District. Terms used in the Water Quality Table are:

- Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCL are set as close as possible to the MCLG's as feasible.
- Maximum Contaminant Level Goal (MCLG): The level of contaminant drinking water below which there is no known or expected risk to health. MCLG's are allowed for a margin of safety.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Nephelometric Turbidity Unit (NTU): A measure of the clarity of water.
- ppm: Parts per million or milligrams per liter.
- ppb: Parts per billion or micrograms per liter.
- Picocuries per liter (pCi/L): A measure of the radioactivity in water.
- NDL – No designated limit.
- ND – Not Detected

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL)	Likely Source of Contamination
Nickel	No	09/08 & 12/08	ND-.001 (1)	ppm	N/A	NDL	Erosion of natural deposits

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
Chromium	No	09/08 & 12/08	ND-.003 (1)	ppm	0.100	MCL =0.100	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	No	09/08 & 12/08	ND-.005 (1)	ppm	0.200	MCL =0.200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Sulfate	No	09/08 & 12/08	ND-11.1(1)	ppm	N/A	MCL =250	Naturally occurring.
Color	No	09/08 & 12/08	5-15(1)	Units	N/A	MCL =15	Natural color may be caused by decaying leaves, plants, and soil organic matter.
Nitrate	No	09/08 & 12/08	0.43-0.15(1)	ppm	10	MCL =10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Sodium	No	09/08 & 12/08	5.4 -30.0(1,2)	ppm	N/A	NDL	Erosion of natural deposits
Phosphorus, Ortho	No	09/08 & 12/08	0.07-0.53(1)	ppm	N/A	NDL	Water additive for Corrosion Control
Zinc	No	09/08 & 12/08	0.006-0.25 (1)	ppm	N/A	MCL =5	Naturally occurring
Iron	No	09/08 & 12/08	0.08-.023 (1)	ppm	N/A	MCL =0.3	Erosion of natural deposits
Manganese	No	09/08 & 12/08	0.04-0.15 (1)	ppm	N/A	MCL = 0.3	Erosion of natural deposits
Barium	No	09/08 & 12/08	0.01-0.03(1)	ppm	2	MCL=2	Erosion of natural deposits
Chloride	No	09/08 & 12/08	12.0-65(1)	ppm	N/A	MCL =250	Erosion of natural deposits
Turbidity	No	6/08-9/08	1(3)	NTU	N/A	MCL =5	Soil Runoff

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
TTHM'S	No	1/08-12/08	Avg 0.044 Range 0.035-0.054	ppm	N/A	MCL Avg=0.08	By-product of drinking water chlorination
Total HAA	No	1/08-12/08	Avg 0.058 Range 0.048-0.066	ppm	N/A	MCL Avg=0.06	By-product of drinking water chlorination
pH	No	1/08-12/08	Avg 6.98 Range 7.7-6.5	pH units	N/A	NDL	
Chlorine Residual, Free	No	1/08-12/08	Avg 1.4 Range 2.0-0.7	ppm	N/A	MCL= 4.0	Water additive for disinfection
Total Coliform	No	1/08-12/08	<u>12 Months</u> 0 positive samples per month	N/A	N/A	MCL =2 or more positive samples per month	Naturally present in the environment
Lead	No	12/08	11.9(4) ND-39	ppb	0	Al=15	Corrosion of Household plumbing
Copper	No	12/08	0.9(5) .05-1.1	ppm	N/A	Al=1.3	Corrosion of Household plumbing
Uranium	No	6/04(6)	0.5	pCi/L	0	MCL=20	Erosion of natural deposits

Footnotes

- (1) One sample per entry point per year is required for this parameter. Samples for the Croton Aqueduct entry point were taken in September and for the Catskill Aqueduct entry point on December.
- (2) Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
- (3) Turbidity is a measure of the cloudiness of the water. It is monitored since it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfection. The highest turbidity for the year was 1 NTU which meets the State Stipulation Agreement that the entry point turbidity can not exceed 5 NTU.
- (4) The level presented represents the 90th percentile of the 40 sites tested. A percentile is a value on a scale of one hundred that indicates the percentage of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90 percent of the lead values detected in the water system. In this case, 41 samples were collected in the water system and the 90th percentile value was the 37th value (11.9 ppb). Hence, the action limit was not exceeded in the December sampling. The action level for lead was exceeded at 4 of the 41 sites.
- (5) The level presented represents the 90th percentile of the 41 sites tested. The action level for copper was not exceeded at any site.
- (6) Sample taken once every six years

Entry point samples for inorganic contaminants that were not detected include; cadmium, nitrite, arsenic, mercury, thallium, antimony, silver, beryllium and selenium. Additionally, all bacteriological samples tested for e-coli were found to be e-coli absent.

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, 2,3,7,8-TCDD (Dioxin), Diquat, Endothall, Glyphosate, 2,4,5-T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl) adipate, 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(MEK), 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, 4-Methyl-2-pentanone, 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, Vinyl chloride, 4,4-DDE, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Acetochlor, Molinate, Terbacil, EPTC, Nitrobenzene, aldrin, chlordane, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, methoxychlor, PCB's, propachlor, toxaphene, DCPA di-,mono-acids, silvex, bis(2-ethylhexyl)phthalate, ethylene glycol, propylene glycol.

Radiological contaminants tested for and not detected in the source water include gross alpha, gross beta, Radium 226, radium 228.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system has no violations. It should be noted that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level (AL) for lead was exceeded in 2008's first sampling period but, was not exceeded in 2008's second sampling period. Lead enters drinking water primarily as a result of corrosion or the wearing away of material containing lead in household plumbing. These materials include lead based solder used to join copper pipes and brass or chrome plated faucets. Based on the exceedence of the lead action level (AL) in the first of the year's two sampling periods, the Village is required to present 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 Briarcliff Manor* 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>.

A discussion of lead in drinking water can be found on Page 9 of this mailing.

The Briarcliff Manor Water System is in compliance with applicable State drinking water operating, and reporting requirements.

INFORMATION ON CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium and Giardia are microbial pathogens found in surface water and groundwater under the influence of surface water. New York City performs extensive testing on the water supply utilized by Briarcliff Manor for cryptosporidium and giardia. During the 2008 calendar year, fifty-two (52) samples of Catskill Aqueduct water were collected and analyzed for giardia cysts and cryptosporidium oocysts. Of the 52 samples, 46 samples were positive for giardia and 10 samples were positive for cryptosporidium. During the period that Briarcliff Manor utilized the

Croton Aqueduct Water Supply, 15 samples of New Croton Aqueduct water were collected and analyzed for giardia cysts and cryptosporidium oocysts. Of the 15 samples, 3 samples were positive for giardia and none were positive for cryptosporidium. While, the testing indicates the presence of cryptosporidium and giardia in our source water, New York City's monitoring program found no evidence of illness from cryptosporidium and giardia related to the New York City Water Supply. Additionally, current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease.

Cryptosporidiosis and giardiasis are intestinal illnesses caused by microscopic pathogens (cryptosporidium and giardia) which can be water borne. But, according to the EPA and the Center for Disease Control and Prevention (CDC), it is unclear how most cases of cryptosporidiosis in the United States are contracted. The relative importance of various risk factors are unknown. Such factors include eating contaminated food, swallowing contaminated recreational water while swimming or camping, contact with animals, contact with human waste, certain sexual practices or drinking contaminated water. Individuals who think they may have cryptosporidiosis or giardiasis should contact their health care provider immediately.

Ingestion of cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. The 2008 cryptosporidium testing found that no sample has a higher concentration than 2 per 50 Liters of water. In a Public Health Update dated February 15, 2002, the Westchester County Health Department stated that at the low levels identified by the New York City testing the "Cryptosporidium are not felt to pose a risk to healthy people"

Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. The Village encourages 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.

Ingestion of giardia may cause giardiasis, an intestinal illness. It should be noted that the February 15, 2002 Public Health Update reported that for a public water supply, "routine chlorination of water is generally sufficient to kill giardia". 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 hand washing practices are poor.

Do I Need to Take Special Precautions?

As has been noted, 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).

Why Save Water and How to Avoid Wasting It?

Although the Briarcliff Manor 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 of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers;
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions and assuring that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, 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 load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it 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 one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

To address the filtration requirements of the Safe Drinking Water Act, the Village has entered into a Stipulation Agreement with the New York State Health Department to replace the Village's existing Croton Aqueduct source of supply with a supply connected to New York City's Lower Catskill/Delaware Aqueduct System. This system which supplies most of New York City and southern Westchester has been given a waiver from filtration requirements, due to its water quality and New York City's watershed protection program. In the event that the Lower Catskill/Delaware Aqueduct System filtration waiver is removed, the City has submitted plans calling for the construction of a filtration plant in the immediate vicinity of Briarcliff Manor's proposed aqueduct connection. Thus, if at some later date, filtration of the Lower Catskill/Delaware Aqueduct System is required, Briarcliff Manor's connection would be at the appropriate location to obtain filtered water from a New York City facility.

As a first step to implement this program, the Village utilizes a connection to the Lower Catskill Aqueduct (through the Village of Sleepy Hollow Water System) which provides sufficient water to meet Briarcliff Manor's demands in the non-summer period (September to May). During the summer months when water demands often exceed the capacity of the current Lower Catskill supply, the Village will continue to use a Croton Aqueduct supply. This is anticipated to continue for the next several years while the Full Supply Facilities to the Lower Catskill Aqueduct are being constructed. Use of the Croton Aqueduct will be eliminated once construction of the Lower Catskill Full Supply System is completed.

As a result of these activities the State Health Department considers the Village to be in compliance with Federal Water Filtration Requirements.

CLOSING

If you have any questions about this report or concerning your drinking water, please contact the Department of Public Works at 941-9105.

LEAD AND COPPER IN OUR ENVIRONMENT

Although most homes have very low levels of lead and copper in their drinking water, laboratory samples tested by the Village have found that some homes in the Water District have elevated levels. The source of the lead and copper is the plumbing system within the home. As a result, some homes in the community have lead levels above the action level of 15 parts per billion of lead (0.015 milligrams per liter), exceeding the State lead control rule. Under the State Sanitary Code, the Village is required to have a program in place to minimize lead and copper in your drinking water. This program includes the construction of a facility to add water treatment chemicals to reduce the corrosiveness of water (which will be part of the Village's Lower Catskill Supply System) and public education.

HOW COPPER ENTERS OUR WATER AND HEALTH EFFECTS OF COPPER

Copper enters drinking water primarily as a result of corrosion or the wearing away of the copper piping in your household plumbing. Copper is an essential nutrient, with most daily multi-vitamins containing 2 mg of copper. But some people who drink water containing copper in excess of the action level 1.3 mg/l over a relatively short amount of time could experience gastro-intestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

HOW LEAD ENTERS OUR WATER

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supply reservoirs. Tests taken from the Village's source of supply, the Croton Reservoir, indicate that there is no lead in the water. Lead enters drinking water primarily as a result of corrosion or wearing away of materials containing lead in household plumbing. These materials include lead-based solder used to join copper pipes, and brass or chrome-plated faucets. In many communities, installation of lead service lines was common until about 60 years ago. The Village of Briarcliff Manor has never found evidence of a lead service line. Thus, it appears that the use of lead service lines was not the practice of plumbers in this area.

In 1986 Congress banned the use of lead solder containing greater than 0.2 percent lead and restricted lead content of faucets, pipes and other plumbing materials to 8.0 percent in a effort to reduce the major sources of lead in our drinking water.

When water stands in plumbing systems containing lead for several hours or more, the lead in the solder may dissolve into the drinking water. This means the first draw of water from the tap in the morning or later in the afternoon if no one is home all day, can contain fairly high levels of lead.

HEALTH EFFECTS OF LEAD

Lead is a common metal found throughout the environment. Lead is in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain, pewter and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children (especially under age 6), pregnant women and their fetuses. Amounts of lead that will not hurt adults can slow normal mental and physical development in the growing bodies of children. Adults who drink this water over many years could develop kidney problems or high blood pressure. Health officials express concern that children at play often come into contact with sources of lead contamination such as dirt and dust that rarely effect an adult. If a child puts dirty fingers into his/her mouth, some lead may be absorbed into the child's system. Officials suggest washing children's hands and toys often and attempting to keep everything out of their mouths but food.

LEAD IN DRINKING WATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase your total lead exposure if there are high levels of lead in your drinking water. This is particularly true for infants who drink baby formulas and concentrated juices that are mixed with water. The U.S. Environmental Protection Agency estimates that on a nationwide basis, drinking water could be the source of up to 20 percent or more of your total exposure to lead. Additional information regarding lead in drinking water is available the State's Drinking Water Hotline (1-800-426-4791).

STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

In order to find out whether you need to take action in your home, have your drinking water tested to determine if it contains excess concentrations of lead. Testing the water is essential because you cannot see, taste or smell lead in drinking water. The Westchester County Laboratory performs this test for a fee of \$21.00 per sample. You may contact them at 231-1620.

If a water test indicates that drinking water drawn from a tap in your home contains lead above 15 parts per billion, you should take the following precautions:

- 1. Flush Your System** Flushing tap water is a simple measure you can take to protect your family. To flush, let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than 6 hours. The longer the water remains in the plumbing in your home, the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 30 seconds.

Although toilet flushing or showering flushes the water through the major portion of your home's plumbing system, you still need to flush the water in each faucet a few seconds before using it for cooking or drinking. Since your faucet can be a major source of lead, always run the water for 2 or 3 seconds to drain out the water in the faucet before using it for cooking or drinking.

To conserve water, fill a container with water while flushing the tap whenever possible, using the first flush to water plants or other uses not involving potability criteria. If you live in a multi-family building, letting the water flow before using it may not work to lessen your risk from lead. Piping in these buildings is often larger than that in a single family home resulting in less effectiveness from flushing. In these cases, your co-op or condo board may need to hire an environmental specialist to locate the source of lead and provide advice on reducing the lead level.

- 2. Use Only Cold Water for Cooking and Drinking** Do not cook with or drink from the hot water tap. Hot water dissolves lead more quickly than cold water. If you need hot water, draw water from the cold water tap and heat it on the stove.
- 3. Remove Loose Solder and Debris from Plumbing Materials** Perform this action on plumbing installed in newly constructed home or homes in which the plumbing has recently been replaced. To do this, remove the faucet strainer from all taps and run the water from 3 to 5 minutes. Thereafter, periodically remove the strainer and flush out debris that has accumulated over time.
- 4. Identify and Replace Lead Materials with a Lead-Free Substance** If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he/she replace the lead solder with lead-free solder. Lead solder looks dull gray and when scratched with a key looks shiny. In addition, notify the New York State Department of Health about the violation.

5. **Determine Whether the Service Line that Connects your Home is made of Lead** Lead service lines were used in some communities until the 1930's, but field investigations by the Village of Briarcliff Manor indicates that apparently lead service lines were never used in Briarcliff Manor. If your house is over 60 years old and you are concerned that the service may be lead, you may decide to hire a licensed plumber to inspect the line.
6. **Have an Electrician Check your Wiring** If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician to determine if your wiring can be grounded elsewhere.

Do not attempt to change the wiring yourself because improper grounding can cause electrical shock and be a fire hazard!

ADDITIONAL STEPS

The six steps described above will reduce lead concentration in your drinking water. However, if your water test indicates that the drinking water coming from your tap contains a lead concentration in excess of 15 parts per billion after flushing, you may want to take the following additional measures:

Purchase or Lease a Home Treatment Device

Home treatment devices are limited in that each unit only treats water which flows from the faucet to which it is connected and all such devices require periodic maintenance or replacement. Devices, such as reverse osmosis systems or distillers, can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap; however, all lead reduction claims should be investigated. Be sure to have a lead test performed to check the actual effectiveness of a specific home treatment device after installing the unit.

Purchase Bottled Water for Drinking and Cooking.

**VILLAGE OF BRIARCLIFF MANOR
LEAD NOTIFICATION PROGRAM**

SOME HOMES PROVIDED WATER BY BRIARCLIFF MANOR HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION.

FOR MORE INFORMATION

On the effects of lead and how you can have your child's blood tested contact :
Westchester County Health Department
(914) 813-5100

If you find that a plumber used solder containing lead after 1986, notify:
New York State Health Department
(518) 473-8600

On having your water tested by a State-approved laboratory, contact:

Westchester County Department of
Laboratories and Research
(914) 231-1620

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