Lead

The Water Works' initial sampling and monitoring program in 1992 demonstrated that samples for lead were above the action level established by the Lead and Copper Rule. The Water Works subsequently created a program to optimize corrosion control for the piping within the distribution system and the piping within your home or business. This program consists of raising the pH of the water to about 7.5 to make it less corrosive to pipe materials, and of adding a blend of poly-orthophosphate to the water. The poly-orthophosphate blend used at the Larchmont and Rye Lake Stations inhibits corrosion by creating a coating on pipe walls and helping to prevent lead and copper from entering the water. The Water Works activated this treatment process in September of 1999. At the Lake Street Station, the zinc orthophosphate performs a similar function. As a result the these actions the Village not exceeded the action level for 2008.

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 Larchmont 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*."

Other Rules Governing Our Operation

Under the federal Surface Water Treatment Rule, surface supplies such as that used by the City of New York require filtration unless certain rigid requirements can be met. New York City's filtration avoidance of its Catskill-Delaware supply was renewed in November 2002. This filtration avoidance is ongoing and is anticipated to remain in effect into the future. This filtration avoidance applies to the Shaft 22 aqueduct connection.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. During 2008, New York City tested for Cryptosporidium oocysts. One hundred – six (106) samples were taken for Cryptosporidiurn oocysts. Of these samples, three (3) had Cryptosporidium oocysts present. Therefore, testing indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporiditun may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome 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.

Giardia

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2008, New York City tested for Giardia. Fifty-three (53) samples were taken for Giardia. Of these samples twenty-eight (28) had Giardia present. Therefore, the testing indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. 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 hand washing practices are poor.

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).

Analytical Testing Results 2008

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
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 of liquid in one million parts of liquid (parts per million - ppm).
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
No Determined Limit (NDL): No level has been established for 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.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected		Unit	MCLG	Regulatory Limit MCL, TT, AL	Likely Source of Contamination
			Larchmont	Rye Lake				
Regulated Inorganic Contaminants								
Barium	No	12/18/07	0.015	0.023	mg/l	n/a	2	Erosion of natural deposits
Chlorides	No	12/18/07	10.3	16.1	mg/l	n/a	250	Erosion of natural deposits
Color - entry point	No	12/18/07	15	10	color units	n/a	15	Presence of iron, manganese, and organics in water
Fluoride	No	12/18/07	0.917	0.696	mg/l	n/a	2.2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron	No	12/18/07	39.8	45	ug/l	n/a	300 (a)	Erosion of natural deposits; corrison of water mains
Manganese	No	12/18/07	46.8	73.4	ug/l	n/a	300 (a)	Erosion of natural deposits
Nitrate	No	12/18/07	ND	ND	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Sodium	No	12/18/07	8.81	11	mg/l	n/a	See health effects	Erosion of natural deposits
Sulfate	No	12/18/07	ND	5.4	mg/l	n/a	250	Erosion of natural deposits
Turbidity - entry point	No	2008	1.90	.97	NTU	n/a	TT≤5 (c)	Soil runoff
Turbidity - distribution	No	2008	0.2-8.4		NTU	n/a	TT≤5 (c)	Soil runoff
Zinc	No	12/18/07	0.004	0.008	mg/l	n/a	5	Naturally occurring
Water Quality Parameters								
Alkalinity	No	12/18/07	16.1	18.5	mg/l	–	NDL	Erosion of natural deposits
Calcium	No	12/18/07	6.1	6.6	mg/l	–	NDL	Erosion of natural deposits
Free Cl2 Res. - distribution	No	2008	0.2 to 1.4		mg/l	n/a	4.0	Water additive for disinfection
Corrosivity	No	12/18/07	-2.12	-1.92	Langelier index	–	NDL	
pH	No	2008	7.4	7.5		–	–	
Temperature		2008	3.7 to 19.9	0.7 to 18.6	Degree C	–	NDL	
Total Dissolved Solids	No	12/18/07	39.6	52.8	mg/l	–	500	Metals and salts naturally occurring in the soil; organic matter
Hardness	No	12/18/07	21	24	mg/l	–	–	
Microbiological Contaminants								
Total Coliform - distribution	No	2008	0.2%		samples	–	5%	Naturally present in the environment
Contaminants Monitored Under Interim Enhanced Surface Water Treatment Rule (Disinfection Byproducts)								
TTHM's	No	2008	32.0 (e)		ug/l	n/a	80	Byproduct of drinking water chlorination
Haloaacetic Acid 5 (HAA5)	No	2008	21 (e)		ug/l	n/a	60	Byproduct of drinking water chlorination
Radiological Compliance								
Gross Alpha	No	2004	-0.225±0.3 (e)		pCi/L	0	15	Erosion of natural deposits
Gross Beta	No	2004	0.125±1.125 (e)		pCi/L	0	50*	Erosion of natural deposits
Radium 226	No	2004	0.005±0.09 (e)		pCi/L	–	5	Erosion of natural deposits
Radium 228	No	2004	-0.15±1.04 (e)		pCi/L	–	5	Erosion of natural deposits
Uranium	No	2004	-0.375±0.7 (e)		ug/l	–	30	Erosion of natural deposits
Lead and Copper Rule Sampling Results								
Lead	No	9/07 to 12/07	90th Percentile (f) 6.1 Range: ND-8.1		ug/l	0	AL-15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	9/07-12/07	90th Percentile (f) 222 Range: 6.3 - 327		ug/l	0	AL-1,300	Corrosion of household plumbing systems; Erosion of natural deposits

(a) If iron and manganese are present, the total concentration of both should not exceed 500 ppb.
(b) Water with >20 mg/l of sodium should not be consumed by those on a severely restricted sodium diet. Water with >250 mg/l of sodium should not be consumed by people on a moderately restricted diet.
(c) Turbidity is a measure of cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches. MCL is the average of two consecutive days. The Larchmont high value occurred on January 5. The Rye Lake high value occurred on June 6.
. This level represents the annual quarterly average calculated form the data collected.
(d) The level presented represents the 90th percentile of the 30 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 values detected at your water system. In the case of lead, 20 samples were collected at our water system and the 90th percentile value was the 3rd highest value (5.6 ug/l). The action level for lead was exceeded at two of the sites tested. In the case of copper, 20 samples were collected from your water system and the 90th percentile value was the third highest value (388 ug/l). The action level for copper was exceeded at one of the sites tested.
The Westchester County Health Department also monitored our system for ethylene and propylene-glycol, deicing agents in the aviation industry. All tests indicated levels below the detectable limit.
The bacteria E. coli was not found in the distribution system. In addition we monitored entry point samples for inorganic contaminants that were not detected. These include; antimony, arsenic, cadmium, chromium, cyanide, lead, mercury, nitrite, selenium and thallium. Organic contaminates that were tested for but not detected in the source water include; carbamate pesticides (EPA method 531.1), chlorine pesticides (EPA method 508), dioxin, diquat, endothall, glyphosate, herbicides (EPA method 515.1), microextractables (EPA method 504.1), volatile organic compounds and organic chemicals (EPA method 525.2).
(f) * The State considers 50 pCi/L to be a level of concern for beta particles.

Conservation

Water is a precious resource. Although the New York City system can provide adequate quantities of water for the City and the suburbs to the north, including the service area of the Larchmont Water Department, during periods of above-normal rainfall, there are years when the usage exceeds the safe yield of the supply. During droughts this can cause serious problems, including the need to restrict water usage. Therefore, by conserving today you can ensure an adequate supply of water for tomorrow. We must use water wisely. Observe the following practices and you will not only conserve water; you will save money as well.

- Use your water meter to check for leaks. Read your meter before going to bed and before you use water in the morning. If there is any registration on the meter, you probably have a leak.
- Use low flow shower heads - save 2 gallons per minute or more
- Repair leaky faucets - a 1/16" leak can waste 100 gallons a day
- Don't flush toilets unnecessarily - use a wastebasket for tissues, etc.
- Check for toilet leaks by adding a little food dye in the toilet tank. If it shows up in the bowl you have a leak
- Use of a toilet dam or installation of a low flush model toilet will reduce your water usage
- Run your dishwasher and washing machine only with a full load
- Water your lawn early in the morning to reduce evaporation loss
- Don't cut the lawn too short - longer grass saves water
- Mulch your trees and plants to retain moisture

Conservation

During 2008, a total of eighteen (18) leaks (15-service lines & 3-main lines) throughout the distribution system were repaired amounting to the elimination of approximately 123 gallons per minute (gpm) of leakage from the system.

Planned System Improvements

This fall and winter season the Village plans to replace the 16" Water Main crossing the Chatsworth Bridge.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call our office if you have questions.