## Annual Drinking Water Quality Report for 2006 Village of Elmsford Water Department 15 S. Stone Avenue Elmsford, New York 10523 Public Water Supply ID# 5903427

## INTRODUCTION

To comply with State regulations, Village of Elmsford 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. We are proud to report that 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 about 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 the Village Engineer's office at 909-1250. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held on Monday evenings at 7:30 PM and are announced in the newspaper, the Village Cable TV Station, the Village Web Page and posted at Village Hall.

# INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

### **Espanol**

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

### 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 other materials, 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 other 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.

The Village purchases it's water supply from the City of New York, Department of Environmental Protection, Bureau of Water Supply. Partially treated water is supplied from a connection to the Catskill Aqueduct. The water originates in a protected watershed area 100 miles northwest of Elmsford in the Catskill Mountains where New York City has constructed 6 large reservoirs that together have the capacity of 473.4 billion gallons of water. This entire system consists of 17 reservoirs in three watershed areas (Delaware, Catskill, Croton), which allows maximum flexibility in delivering the highest quality of water possible. The entire New York City reservoir system has the ability to deliver a maximum of 1.45 billion gallons per day. The Catskill & Delaware waters normally mix in the Kensico Reservoir located in the town of Mount Pleasant. This "blending" of the water upstream of our point of withdrawal enhances the overall water quality. Kensico Reservoir also acts as a large settling basin due to the twenty to thirty day retention time it takes water to travel through the reservoir. During this time, any natural organic materials measured as "turbidity" that seasonally occurs from spring run-off and heavy rains upstate, settle out in the large reservoir thereby clarifying the water. The Catskill/Delaware raw water quality, south of the Kensico Reservoir, is of such high quality that the Federal Environmental Protection Agency and the New York State Health Department have given a filtration waiver to communities relying on this water. The Catskill water north of the Kensico Reservoir, due to the seasonal "turbidity events" and the Croton system, due to deteriorated quality, must both be filtered to meet federal and state requirements. This explains why some Northern Westchester districts and Hudson River communities filter or are planning to filter their water. Since Elmsford takes its water after it has had the advantage of the above-described natural treatment, the quality meets all regulatory requirements and needs only minimal additional treatment for disinfection purposes. During 2006, our system did not experience any restriction of our water source.

### FACTS AND FIGURES

Our water system serves approximately 4,676 people (based on 2000 census figures) through 1,201 service connections. The total water produced in 2006 was 231 million gallons; another 2 million gallons was purchased from the Town of Greenburgh during periods when the Catskill Aqueduct was shut down for maintenance by the City of New York. Greenburgh also purchases water from the City of New York, through a separate aqueduct.

The daily average of water treated and pumped into the distribution system was 638,000 gallons. The amount of water delivered to customers for the year was 179 million gallons. When subtracted from the amount of water produced, this leaves an un-metered total of 54 million gallons or 23% of the total amount produced. This water was used to flush mains to improve water quality, test fire hydrants, fight fires and lost through leakage. In 2006, water customers were charged \$5.00 per 1,000 gallons of water (as of 9/1/04); commercial users were charged a stepped rate as follows:

\$ 5.25 per 1,000 gallons from 1,000 gallons to 100,000 gallons used
\$ 5.50 per 1,000 gallons from 100,001 gallons to 200,000 gallons used
\$ 5.75 per 1,000 gallons from 200,001 gallons to 300,000 gallons used
\$ 6.25 per 1,000 gallons from 300,001 gallons to 400,000 gallons used
\$ 6.75 per 1,000 gallons from 400,001 gallons to 500,000 gallons used
\$ 7.25 per 1,000 gallons from 500,001 gallons and above.

### 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, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. 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 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 Health Department at 813-5000

Table of Detected Contaminants							
Contaminant	Violatio n Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measure ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Sources of Contamination
TTHM (Chloroform, Bromodichloromethan e Dichloromethane, And bromoform)	no	1/23/0 6 8/23/0 6	9.9 43.1	ug/L	N/A	100	By-product of drinking water Chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Haloacetic Acid	no	8/23/0 6	33.7	ug/L	N/A	60	By-product of drinking water Chlorination.
Turbidity <sup>1</sup>	no	1/23/0 6	1.5 0.96 avg.	NTU	N/A	5	Soil Runoff
Fluoride	no	1/23/0 6	.763	mg/L	N/A	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium	no	1/23/0 6	15.8	ug/L	2,000	2,000	Naturally occurring
Chloride	no	1/23/0 6	11.6	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
Sodium	no	1/23/0 6	8.7	mg/L	N/A	20 mg/L	Naturally occurring; Road salt; Water Softeners; Animal Waste.
Manganese	no	1/23/0 6	21.9	ug/l	N/A	300 ug/l	Naturally occurring, indicative of landfill contamination
Magnesium	no	1/23/0 6	1380	ug/l	N/A	N/A	Naturally occurring
Nitrate	no	1/23/0 6	0.26	mg/l	N/A	10 mg/l	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Iron	no	1/23/0 6	51.6	ug/l	N/A	300	Naturally occurring
Sulfate	no	1/23/0 6	7.2	mg/l	N/A	250	Naturally occurring
Total Dissolved Solids	no	1/23/0 6	64.8	mg/l	N/A	N/A	Naturally occurring
Copper <sup>2</sup>	no	6/20/0 6- 9/22/0 6	500 1.6 – 896	ug/l	N/A	AL – 1,300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead <sup>3</sup>	no	6/20/0 69/22/ 06	5.1 ND - 22	ug/l	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits
Radium 226 & 228	no	1/23/0 6	0.646	pCi/l	N/A	5 pCi/l	Erosion of natural deposits

#### Notes:

1 – Turbidity is a measure of the cloudiness of the water. Our highest single turbidity measurement (1.5 NTU) for the year occurred on May 15, 2006. State regulations require that turbidity must always be below 5 NTU.

2 – Copper - The level presented represents the 90<sup>th</sup> percentile of the 40 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case 40 samples were collected at your water system and the 90<sup>th</sup> percentile value was the fifth highest value (500 ug/l). The action level for copper was not exceeded at any of the sites tested.

3 – Lead - The level presented represents the 90<sup>th</sup> percentile of the 40 sites tested. The action level for lead was exceeded at two of the 40 sites tested. The Village has a corrosion control program, which is helping reduce the amount of lead and copper in the water system. This program includes chemical treatment for corrosion control, sampling at houses with highest risk (i.e. houses with lead piping or lead solder on their pipes) and replacement of lead house service lines whenever encountered. Since starting the program, the lead levels have been decreasing.

#### **Definitions:**

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

<u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. <u>Non-Detects (ND)</u>: Laboratory analysis indicates that the constituent is not present.

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

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

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

<u>Picocuries per liter (pCi/L)</u>: A measure of the radioactivity in water.

#### 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 level allowed by the State.

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

During 2006, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### **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).

### 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 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 pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so 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 up to 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 up and you can save almost 6,000 gallons per year.
- Check your toilets for leaks. 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. The Village has toilet leak detector kits available for free to all residents; call Village Hall at 592-6555 or the Water Department at 592-7770. You can also check your toilets for leaks by putting a few drops of food coloring in the tank and watch for a few minutes to see if the color shows up in the bowl.
- 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

The Village has received Health Department approval for a new tablet chlorination system which will be safer and less costly to operate than the existing liquid chlorine system. In addition, the new system will be computer controlled to maintain a more accurate dosage of chlorine in the system. The Village is completing the replacement of all water meters with newer models that can be read by a portable

handheld scanner and downloaded to a computer for billing. This will provide for more accurate and efficient meter reading. If you have one of the few meter that has not yet been replaced, contact the Village of Elmsford Water Department immediately at 592-7770 to make an appointment.

### 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 the Elmsford Village Engineer – 909-1250 if you have questions.