

# **Annual Drinking Water Quality Report for 2005**

## **Village of Clinton**

**P.O.Box 242, Clinton, NY 13323**

**(Public Water Supply ID#3202386)**

### **INTRODUCTION**

To comply with State regulations, the Village of Clinton, will be annually issuing a 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality statement. 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 Dale Jewell, Water Operator or Bob Galinski, Chief Operator at (315) 853-2240. 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 the first Monday of each month at 7:00 pm at the Village Offices located at Lumbard Hall.

### **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 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 source is a groundwater source that is pumped from two separate well fields, four wells located on Sanford Avenue, and two wells on Old Boorne Road. Groundwater is drawn from six wells, ranging from 40-42 feet deep. During 2005 our system did not experience any restriction of our water source. The water is disinfected with sodium hypochlorite prior to distribution. In addition, hydrofluosilic acid (fluoride) is added to the water prior to distribution. Any water not used by our customers is stored in two steel storage tanks, a 300,000 gallon tank on Kellogg Street and a 540,000 gallon tank located on South Street.

### **SOURCE WATER ASSESSMENT INFORMATION**

A source water assessment is a process by which possible and actual threats to drinking water source(s) are determined. A source water assessment was completed for the Village Of Clinton water system. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily the contaminants can move through the subsurface to the source(s). The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to the consumers is, or will become contaminated. The source water assessment program (SWAP) is designed to compile, organize and evaluate information to make better decisions regarding protecting sources of public drinking water. A copy of the assessment, including a map of the assessment area can be obtained by contacting us as noted above.

The land uses around the Village of Clinton water system sources were rated for their potential to cause contamination to the sources. The sources were rated at a medium risk for nitrates, protozoa, enteric bacteria, and enteric viruses. Discrete potential source of contamination around the sources include a pest control site, several gas stations, and auto service stations, and a dry cleaning business. When the potential land use contaminants are combined with the medium risk factors presented by the discrete potential sources and the high natural sensitivity of the sources, the public drinking water source is at a high to medium high susceptibility for contamination. The high natural sensitivity is based on contaminant history, soils, surficial geology, and aquifer information and bedrock geology. See section "Are there contaminants in our drinking water?" for a list of contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Based upon the SWAP report determinations, good judgement should be used and caution should be exercised when determining placement of certain materials, actions and facilities, including septic systems high-rise business or chemical storage near the source(s). We work hard to ensure that the source of water for our system is protected from contamination.

### **FACTS AND FIGURES**

Our water system serves a population of 3000 through 1140 metered connections. The total water produced in 2005 was over 164000000 gallons. The amount of water delivered to customers was over 91556000. This leaves an unaccounted for total of around 72504000 gallons. This water was used to flush mains, fight fires, street cleaning, and leakage. (55 % the total amount produced). Water customers inside the village limits are charged \$12.00 per 1,000 cubic feet of water and outside the village the rate was \$24.00 per 1,000 cubic feet.

## 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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, 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, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Oneida County Health Department at (315) 798-5064

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants- None Detected – 3 Samples Monthly							
Inorganic Contaminants							
Barium	No	10/03	0.095	mg/l	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper	No	9/03	0.11 <sup>(2)</sup> (range = 0.047 – 0.14)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems
Fluoride (System Entry Point)	No	5/05	1.0	mg/l	N/A	MCL = 2.2	Erosion of natural deposits; Water additive that promotes strong teeth ( <i>The Village of Clinton adds Fluoride to the water</i> ); Discharge from fertilizer and aluminum factories.
Fluoride (Distribution System)	No	5/05	0.94 (range = 0.7 - 1.4)				
Lead	No	9/03	0.003 <sup>(3)</sup> (range = ND – 0.005)	mg/l	0	AL = 0.015	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate	No	8/05	1.4 (Sanford Ave Wells) 1.4 Old Bourne Rd Wells)	mg/l	10	MCL = 10	Runoff from fertilizer use; Erosion of natural deposits
Sulfate	No	3/99	67 (Sanford Ave Wells) 94 (Old Bourne Rd Wells)	mg/l	N/A	MCL = 250	Naturally occurring
Synthetic Organic Contaminants including Pesticides and Herbicides – None Detected – Sampled in 2003							
Volatile Organic Contaminants - None Detected – Sampled in 2003							
Disinfection By-Products (See Table 17 of Part 5)							
Chlorine Residual	No	Various (Daily/ Monthly)	0.44 (range = 0.2 – 0.8)	mg/l	N/A	MRDL = 4 <sup>(5)</sup>	By-product of drinking water chlorination
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	8/05	.0060	mg/l	N/A	MCL = 0.060	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	8/05	0.016	mg/l	N/A	MCL = 0.080	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Other Principal Organic Contaminants – None Detected – Sampled in 2003							

### Notes:

- 1 -The state considers 50 pCi/l to be the level of concern for beta particles.
- 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 your water system. In this case, the 90th percentile was the second highest value or 0.11 mg/l. The action level for copper was not exceeded at any of the 10 sites tested.

- 3 - The level presented represents the 90th percentile of the 10 sites tested. The action level for lead was not exceeded at any of the sites tested.
- 4 - This level represents the annual average calculated from sample submission results.
- 5 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.

#### **Definitions:**

**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.

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

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**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).

**Picocuries per liter (pCi/l):** 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, typically these contaminants were detected below the level allowed by the State.

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

During 2005, 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 wells, 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 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 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**

In 2005 the security measures at the water plants were upgraded. The NY Rural Water Association performed leak detection tests and provided a list of locations of obvious leaks. Four fire hydrants were repaired. Water flow tests were performed on parts of the water system. In addition, selected water valves in the water system were exercised, cleaned and checked.

### **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. Please call the Village office if you have any questions at (315) 853-5231.