



## ***Village of Rouses Point Annual Drinking Water Quality Report for 2010 (Public Water Supply ID# 0900223)***

### **INTRODUCTION**

To comply with State regulations, The Village Rouses Point 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, we conducted tests for 92 contaminants. 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 **Gary Molinski, Chief Operator**, at 297-5502 ext. 313. 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 held on the 1<sup>st</sup> and 3<sup>rd</sup> Mondays each month at the Civic Center.

### **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; primary inorganic contaminants; pesticides and herbicides; principal organic chemical contaminants; and radioactive contaminants, asbestos. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that 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 a population of approximately 2,500 people through 850 service connections. Our water source is surface water drawn from Lake Champlain by means of a 1,300 ft. intake pipe. The water is filtered and chlorinated at the plant before being pumped to our 1.5 million gallon storage tank and then to the distribution system.

### **SUMMARY OF SOURCE WATER ASSESSMENT**

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source are elevated. The State source water assessment includes susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move to the source. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters in the future.

Land cover and its associated activities within the assessment area does not increase the potential for contamination. The amount of agricultural lands (row crops) in the assessment area results in a medium potential for pesticide contamination. In addition, the elevated density of CAFO's (confined animal feeding operations) in the assessment area may add to the potential for protozoa and phosphorus contamination. There is a high density of sanitary wastewater discharges, which results in elevated susceptibility for numerous contaminant categories. Non-sanitary wastewater discharges may also contribute to contamination. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: chemical bulk storage sites and toxic release inventory sites. Also, storm generated turbidity can impact water quality at the intake.

### **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, E coli, Nitrate (asN), lead & copper, primary inorganic compounds, disinfection by products (Haloacetic acid and Trihalomethanes), principal organic compounds, synthetic organic compounds, radium 226 & 228, asbestos, gross beta particles, gross alpha particles and turbidity. 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 (Clinton County Health Department at 518-565-4870. As the State regulations require, we routinely test your drinking water for numerous contaminants.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination

#### Microbiological Contaminants

Turbidity ( 1 )	No	12/1/10	1.59	NTU	N/A	TT= < 5 NTU	Soil runoff
Turbidity ( 1 )	No	12/1/10	99.99% <1.0	NTU	N/A	TT= 95% of samples <1 NTU	Soil runoff
Total Coliform	No	3 Samples Per Month	No positive samples	N/A	N/A	MCL=2 or more Positive samples	Naturally present in the environment

#### Inorganic Contaminants

Asbestos	No	4/22/09	<0.12	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Calcium	No	11/16/10	18	Mg/l	N/A	N/A	Naturally occurring
Copper ( 2 )	No	7/09	90 <sup>th</sup> %= 0.066 to 0.290	Mg/l	1.3	1.300 Mg/l	Corrosion of household plumbing, erosion of natural deposits
Iron	No	11/16/10	0.025	Mg/l	N/A	0.3 mg/l **	Naturally occurring
Lead ( 3 )	No	7/09	90 <sup>th</sup> %=3 BRL to 16	Ug/l	0	15 Ug/l	Corrosion of household plumbing systems
Magnesium	No	11/16/10	4.3	Mg/l	N/A	N/A	Naturally occurring
Nitrate as N	No	3/18/10	0.22	Mg/l	10	10	Runoff from fertilizer use, leaching from septic systems, erosion of natural deposits
Potassium	No	11/16/10	1.6	Mg/l	N/A	1.0 mg/l	Naturally occurring
Sodium	No	11/16/10	12	Mg/l	N/A	N/A	Naturally occurring
Sulfate	No	11/16/10	8.8	Mg/l	N/A	250 mg/l **	Naturally occurring

#### Radiologicals

Beta	No	5/12/10	1.4E +/- 0.9E	pCi/l	0	50	Decay of natural deposits
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#### Volatile Organic Contaminants

Bromo-dichloromethane	No	11/16/10	0.0028	Mg/l	N/A	N/A	By product of drinking water chlorination
Chloroform	No	11/16/10	0.034	Mg/l	N/A	N/A	By product of drinking water chlorination

#### Disinfection By Products Stage 1

Haloacetic acid	No	3/10/10 6/10/10 9/7/10 12/14/10	RAA=35.28 range 18.0-48.8	Ug/l	60.0	60.0	By product of drinking water chlorination
TTHMs (total Trihalomethanes)	No	3/10/10 6/10/10 9/7/10 12/14/10	RAA= 63.40 range 47.1-87.7	ug/l	80.0	80.0	By product of drinking water chlorination

#### Additional Disinfection by product sampling

Haloacetic acid	No	2010	17.5-37.1( range of 4 samples)	Ug/l			
TTHMs	No	2010	26.6-73.4(range of 9 samples)	Ug/l			

**Note:** The level represented for Haloacetic acid and Trihalomethanes are reported as RAA (running annual average) of the quarterly samples collected in 2010. Our test result range for TTHMs was 47.1 to 87.9, for Haloacetic acids it was 18.0 to 48.8.



**Note:** \*\* Denotes Secondary Maximum Contaminant Level (SMCL)

1. Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 12/1/10, 1.59 NTU. State regulations require that turbidity must be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1 NTU; we were able to maintain 99.99%.
2. The level presented represents the 90<sup>th</sup> percentile of the 20 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. The action level for copper was not exceeded at any of the sites tested in 2009.
3. The level presented represents the 90<sup>th</sup> percentile of the 20 sites tested. The action level for lead was exceeded at only 1 of the 20 sites tested in 2009.
4. **Definitions:**
5. **BRL:** Below reportable limits
6. **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.
7. **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.
8. **Maximum Residual Disinfection Level (MRDL):** 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 affects.
9. **Maximum Residual Disinfection Level Goal (MRDLG):** A maximum level of a disinfectant added for water treatment and for which no known or anticipated adverse health effect on human health would occur, allowing for an adequate margin of safety.
10. **Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
11. **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
12. **Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.
13. **Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
14. **Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
15. **Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
16. **Picocuries per liter (pCi/l):** A measure of radioactivity

## WHAT DOES THIS INFORMATION MEAN?

The table shows that we met all of our required testing and that we did not exceed the action level any contaminants.

The Village of Rouses Point implemented a corrosion control program in June, 2006, since then the Village of Rouses Point has completed three rounds of sampling for lead and copper with no violations. The Village of Rouses Point is now on reduced monitoring for lead & copper. The Village of Rouses Point will not have to sample for lead & copper again until 2012.

We are providing the following information on lead in drinking water.

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Rouses Point Water Treatment Plant 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 or at <http://www.epa.gov/safewater/lead>.

We have learned through our testing that some other contaminants have been detected; however, these contaminants were detected below New York State requirements.

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

**We were in compliance for Haloacetic Acids and Trihalomethanes for the entire year of 2010.** We had no positive test result for total Coliform. In June of 2009 we began Stage II Monitoring for Trihalomethanes and Haloacetic Acids at 2 new sampling sites in the Village. The Village was also required, as part of Stage II Monitoring, to conduct sampling of the untreated (raw water) from Lake Champlain for E-coli. This sampling began in October of 2008 through September of 2009; samples were collected every 2 weeks for a total of 24 samples. The requirement for surface water was that we had to maintain an average of 10.0 or less to be in compliance. If we were not able to maintain an average of 10.0 or less we would then be subject increased monitoring and sampling. Our average for the 24 samples that were collected during this period was < 1, meaning that the Village of Rouses Point is in compliance and that no further E-coli sampling is required.

## Information on 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. Ingestion of Cryptosporidium 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.



## Information on 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. 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?

*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.*

## System Improvements

The Village implemented a corrosion control program in 2006 to meet State requirements and to be in compliance with Lead & Copper regulations. We have taken the serpentine pipe out of service to decrease the chlorine contact time to help meet the regulatory limits for Disinfection by-Products (DBP's). In 2009, with assistance from Clinton County Health Department and our Village engineer, the Village implemented a pilot program to change how we chlorinate the filtered water. The Village now has 2 injection locations, one at the water treatment plant and the other at the water storage tank. Since the Village implemented these changes we have been able to lower our DBP's.

**The Village was in compliance for Haloacetic Acids and Trihalomethanes for all 4 quarters of 2010.**

## Closing

**The Village of Rouses Point had ( NO ) violations of any kind in 2010.** The Village of Rouses Point would like to thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we 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 the heart of our community. Please call our office if you have questions.