Annual Drinking Water Quality Report for 2009

VILLAGE OF LYNDONVILLE
2 South Main Street, Lyndonville, N.Y. 14098
(Public Water Supply ID# NY3600599)

And Town of Yates Water District # 4 (PWS ID # NY3630017)

March 2010

INTRODUCTION

To comply with State regulations, the Village of Lyndonville annually issues 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 not violated a maximum contaminant level or any other water quality statement during 2009. 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 **Terry Woodworth, Water Superintendent at (585) 765-9312.** We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled meetings on the 2nd Monday of every month at the Village Hall 2 South Main Street, Lyndonville N.Y. 14098. Customers of the Town of Yates Water District #4 may also contact **Roger Wolfe, Town of Yates Water Superintendent at (585) 765-9735** or attend Town Board meetings held on the 2nd Thursday of each month at the Town Hall, 8 South Main Street, Lyndonville.

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.

The Village of Lyndonville Water Treatment Plant gets its water from Lake Ontario. The water treatment plant, located in [illegible] Road, uses chlorination, coagulation, flocculation, sedimentation and a slow-

Shadigee at the northern end of Lyndonville Road, uses chlorination, [illegible] sand filtration process to ensure the quality of the water. Chlorination is used for disinfection. In addition, fluoride, for the prevention of tooth decay, is added to the potable water prior to distribution to Lyndonville and Yates.

FACTS AND FIGURES

The Village of Lyndonville serves approximately 1100 people through 350 service connections. In addition, the Village supplies finished water to The Town of Yates Water District # 4 which serves approximately 1788 people through 709 service connections. The total water produced in 2009 was 66,276,000 gallons. Approximately 94% of the total was billed directly to consumers. The balance, or unaccounted for water, was used for flushing mains, water plant operations, distribution system leaks, and fighting fires. The average amount of water treated and pumped into the distribution system is 181,000 gallons per day with a highest day total of 346,000 gallons in 2009.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, the Village of Lyndonville routinely tests 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, 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 Orleans County Health Department at (585) 589-3252.

Table 1: Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Fluoride	No	4/09	1.0	mg/L	n/a	MCL=2.2	Erosion of natural deposits; added to water supply to

							prevent dental caries
Barium Arsenic Nickel	No	4/09	0.022 <0.003 <0.005	mg/L	2 0.01 0.1	MCL =2 0.01 0.1	Discharge of drilling wastes; Erosion of natural deposits.
Copper*	No	2009	0.33	mg/L	1.3	AL=1.3	Corrosion of copper pipes; Erosion of natural deposits
Lead*	No	2009	0.008	mg/L	0	AL=0.015	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate	No	5/09	0.36	mg/L	10	MCL =10.0	Runoff from fertilizer use leaching from septic systems, Erosion of natural deposits
Entry point Turbidity*+	No	1/09-12/09	0.02-0.25	NTU	N/A	MCL= 1.0	Soil Runoff
Radioactive Contaminants							
Gross Beta particle** and photon activity	No	4/05	1.9+/- 0.9	pCi/L	50	50	Decay of natural deposits and man-made emissions.
Gross alpha activity	No	4/05	<0.5	pCi/L	15	MCL = 15	Erosion of natural deposits.
Disinfection Byproducts							
Total Trihalomethanes	No	2009 Average	49.7	ug/L	n/a	MCL=80	By-product of drinking water chlorination
Haloacetic Acids	No	2009 Average	4.5	ug/L	N/A	MCL=60	By-product of drinking water chlorination

*†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. Regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. All samples collected in 2009 were below the treatment technique level.

** The level presented represents the 90th percentile of the ten sites tested. A percentile is a value on the 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 lead and copper values detected at your water system. In this case, ten samples were collected at various sites in the distribution system and the 90th percentile value was the ninth highest value. One sample for lead and copper showed*

results above the action level.
*** The state considers 50 pCi/l to be the level of concern for beta particles.*

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.
Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in 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.
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.

The Village of Lyndonville has not exceeded MCL for total coliform during the 2009 reporting period.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, our system had no violations. We're proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected. However, these contaminants were detected below the level allowed by the State. The EPA has determined that your water IS SAFE at these levels.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Village of Lyndonville is required to monitor your drinking water for specific contaminants on a regular basis as an indicator of whether or not your drinking water meets prescribed health standards. During 2009, 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.
* 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. The water department (765-9312) is available by appointments for inspection of leaks.

Source Water Assessment Program (SWAP)

The NYS DOH has evaluated the Lyndonville water system's susceptibility to contamination under the SWAP, and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this water system. The Lyndonville water system provides treatment and monitoring to ensure the water delivered to consumers meet all applicable standards. The Great Lakes' watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. Zebra Mussels-intake clogging and taste and odor problems). The summary is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at the Lyndonville water intake.
The assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa, DBP precursors, and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There are no noteworthy contamination threats associated with other discrete contaminant sources. A complete copy of the Lyndonville water systems SWAP is available at the Village Clerks office, 2 South Main Street.

FLUORIDE ADDITION INFORMATION

Our system is one of the many water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Center for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires supplements in your water provides optimal dental protection the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2009 monitoring showed fluoride in your water were in the optimal range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

SYSTEM IMPROVEMENTS

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. The operation and maintenance program are critical in maintaining the quality of finished water. During 2009 the Village of Lyndonville completed the conversion of the water meters to a touch read system. An inter-municipal agreement was formed with the Town of Yates for the use of their meter reading equipment resulting in a considerable savings for the Village. The Village also replaced a 10" valve to the finished water clearwell that had malfunctioned. The Town of Yates performed routine maintenance such as flushing dead ends and hydrants, exercising main valves and painting of all fire hydrants. A new meter reading system was also purchased to upgrade the current system. Lyndonville won the Orleans County Best Water Taste Contest again in 2009 but lost at the regional level.

CLOSING

The Village of Lyndonville and the Town of Yates are proud to continue providing you with clean, quality water. Please call our office at (585)765-9312 if you have any questions.