

2010
VILLAGE OF PHELPS
ANNUAL WATER QUALITY REPORT
Village of Phelps Water Supply
Public Water Supply ID #F3401162

Last year, as in years past, your tap water met all State drinking water health standards. The Village of Phelps is proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This report is 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. We are pleased to provide you with this information because informed customers are our best customers.

State and Federal regulations now require that all community water systems regardless of population served, including municipal water systems, mobile home parks and private water supply companies, provide their customers with an Annual Water Quality Report covering calendar year 2010.

This report is intended to provide customers served by the Village of Phelps' water system information on the most common questions asked about their water system.

The report also provides information on results of tests that we perform to ensure that the water supply complies with all Federal and State drinking water standards.

Additional Information

For additional information or questions about this report please call Carl L. Peake, Water Systems Operator at 548-3254. Normal daily operations are between 7:00 a.m. and 3:30 p.m. Appointment for meter service or technical questions please call 548-3254.

Water Billing

For questions concerning water billing please call 548-3861, between 8:00 a.m. and 4:30 p.m.

Village of Phelps Address

Village of Phelps; 8 Banta Street, Suite 150; Phelps, NY 14532

Water Rates

Village of Phelps Users \$4.68/100 cubic feet - Minimum Bill \$23.39

Outside Users \$7.02/100 cubic feet - Minimum Bill \$35.09

Water Conservation Measures

Customers can take measures to reduce their water usage, therefore reducing their water bills. Some reduction measures could include stopping all water leaks, installing low-water use plumbing fixtures and water-saving devices, thinking about the way water is used, and changing behaviors.

Security

The Village of Phelps feels that the security of your water system is an important responsibility. We would ask that you, the public, become involved in our security efforts. If you see any suspicious activity in or around Village facilities, please contact the Village or any local law enforcement agency. Suspicious activity may include unattended fire hydrants with the caps off or the water running, unauthorized cars or people loitering near water storage facilities or people taking pictures of any Village property or infrastructure. Your help in this effort would be greatly appreciated.

After Hours Emergency

Example: Water main break — please call the Ontario County Sheriff at 781-1200 or dial 911.

Public Participation

Public participation in decisions that affect drinking water quality may be voiced at regularly scheduled Village of Phelps Board Meetings, which are held on the second Monday of each month at 7:00 p.m., 8 Banta Street in the Village Meeting Room.

Description of Water System

The Village of Phelps owns and operates its own water system. Water is supplied from the Village of Newark. The connection to Newark's source is located at Route 96 and Route 488.

The distribution system consists of 80,040 feet of water pipe, over 830 individual services serving 1972 people, approximately 85 hydrants and over 75 main line valves. Water pressure and storage are maintained by a 1.5 million gallon above ground level tank reservoir located on Mary Street.

Water Treatment Village of Newark Source

The Village of Newark, New York uses Canandaigua Lake as its source of water. The New York State Department of Health has recently completed a Source Water Assessment of the Lake. This 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, phosphorous, DBP precursors, and pesticides contamination. There is also a moderate density of sanitary wastewater discharges, but the ratings for the individual discharges do not result in elevated susceptibility ratings. However, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination, (particularly for protozoa). There are no noteworthy contamination threats associated with other discrete contaminant sources.

Canandaigua Lake is approximately 16.4 square miles in surface area and has a watershed area of about 174 square miles. The Village is permitted to draw 4.0 million gallons of water per day to be used as a source of supply for its water treatment plant located at 1708 Freshour Road, Shortsville, New York. Water, as it enters the intake line in Canandaigua Lake, has chlorine added to

control the growth of Zebra Mussels. These mussels have been proven to clog pipelines by their rapid growth. The water flows by gravity through a 24" line to the filter plant. At the treatment plant, all water is filtered by Slow Sand Filtration, Diatomaceous Earth Pressure Filtration and/or Diatomaceous Earth Vacuum Filtration. There are four Slow Sand filters and three D.E. Filters with an overall capacity of 3.4 million gallons per day. After filtration, chlorine is added at a rate of approximately 1.8 parts per million for disinfection. Fluoride is also added to the water at a rate of 1 part per million. These are recommended levels set by the New York State Department of Health. From the Filter Plant, the water flows through a 20" pipeline to a point near the intersection of Route 96 and County Rd. 7 where the line divides into two 16" pipelines. One 16" line carries water north, approximately 7 miles, to the 4 million gallon capacity Allerton Hill Reservoir. This flow is entirely by gravity. The other 16" line carries water east, approximately 4.25 miles, where it connects to a 14" transmission line. This line, which was originally used to carry water from Newark Lake, goes north, into the Village and the 1 million gallon capacity South Hill Standpipe. The Village of Clifton Springs is served off the later 16" pipeline. The Village of Phelps is served off the 14" pipeline approximately .5 miles south of the point where the 16" and 14" lines intersect. Two pumps in the Route 96 Pump Station provide the pressure needed to supply this portion of the system. Also, a polyphosphate corrosion inhibitor is added to the water.

Our system is one of many drinking 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 Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2mg/l, (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor levels on a daily basis. During 2010, monitoring showed fluoride levels in your water system were in the optimal range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2mg/l MCL for fluoride.

During 2010, our water system did not experience any restriction of our water source.

WATER QUALITY - How do you know your water is safe?

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 in some cases, radioactive material, 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 EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be 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 at 1-800-246-4791.

Under the Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (EPA) sets national limits on contaminant levels to ensure safety of your drinking water. A Maximum Contaminant Level Goal, (MCLG), is 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. A Maximum Contaminant Level, (MCL), is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible. In accordance with New York State regulations, the Village of Newark and Village of Phelps routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants and total trihalomethanes. Additionally, your water is tested for coliform bacteria monthly. The contaminants detected in your drinking water are included in the Table of Detected Contaminants. Something every regulation has in common is a requirement to notify the public if there is a regulation violation. If we violate a regulation we are required to let you know. The EPA also requires water suppliers to monitor for unregulated contaminants to provide occurrence data for future 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, people 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).

In New York, the State Health of Department is responsible for enforcing EPA's regulations. The state has the option, which it has used in several cases, to implement its own regulations if they are equivalent or more stringent than the EPA's. The State Health Department reviews and approves treatment plant and distribution system modifications as well as new construction. They also review all our operating and monitoring data for compliance on a monthly basis.

The Geneva office of the New York State Department of Health has jurisdiction over the Village of Phelps Water System. They can be contacted at:

New York State Department of Health
Geneva District Office
624 Pre-Emption Road
Geneva, NY 14456-1334
(315) 789-3030

VILLAGE OF PHELPS Water Source Detected Contaminants

The Village of Phelps is required to collect and analyze two total coliform samples per month within their water system. The table below summarizes total coliform testing for 2010.

Microbiological Contaminants

Contaminants	Violation?	MCL	MCLG	Sources in Drinking Water	Total Samples
Total Coliform Bacterial	No	Any positive sample *2	0	Naturally present in the environment	24
E. Coli	No	Any positive sample	0	Human and animal fecal in water	24

A violation occurs at systems collecting less than 40 samples per month when two or more samples are total coliform positive.

Village of Newark Water Source Detected Contaminants

TURBIDITY

Turbidity is a measurement of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Below is a table showing performance standards determined by the State and the results of our monitoring.

Contaminants	Violation?	Date of Highest Sample	Level Detected	MCLG	Regulatory Limit (MCL, TT, or AL)
Turbidity (Highest Annual Test Result)	No	02/04/10	.65 NTU	N/A	TT=<5 NTU
Lowest Monthly % of Samples meeting requirements	No		100%	N/A	TT=95% of samples <1.0 NTU

Notes: State regulations require that turbidity must always be below 5 NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 1.0 NTU. 100% of the turbidity measurements of water leaving the Newark Filter Plant in 2010 were below 1.0 NTU.

Tables of Detected Contaminants

The Village of Phelps is required to test the Lead and Copper in the water distribution system every 3 years. 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 the materials and components associated with service lines and home plumbing. The Village of Phelps 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 of 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>. There was a round of sampling conducted during the summer of 2010. No violations were found as a result of this testing. Below is a summary of these results.

Parameter	EPA/NYS Limits	Range of Values	90th Percentile Value	% Homes exceeding action level
Lead	AL=15 ug/l	ND-7.1ug/l	4.5 ug/l	0
Copper	AL=1.3 mg/l	.18 mg/l - 1.8 mg/l	1.2 mg/l	0

Parameter (all sampled 12/8/10)	Violations?	EPA/NYS Limits	Units	Results	Likely Source of Contamination
Barium	No	10	ppm	0.023	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries.
Nitrate	No	10	ppm	.16	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nickel	No	50	ppb	1.8	Geologic formations or used in electroplating, battery production and ceramics.

Chromium	No	6	ppb	4.8		Discharge from steel and pulp mills; erosion of natural deposits.
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**Parameter Violations? EPA/NYS Limits Units Results Samples
In
2008 Likely Source of Contamination**

**Radioactive
Contaminants**

Gross Alpha No 15 PCi/L -0.584 0 Erosion of natural deposits of certain minerals that are radio- active and may emit a form of radiation known as alpha radiation.
(Sampled 9/21/07)

Gross Beta
(Sampled 9/21/07) No 50* PCi/L 2.33 0 Decay of natural and manmade deposits of certain minerals that are radioactive and may emit a form of radiation known as photons and beta radiation.

Radium – 226* No 5 PCi/L -0.0625 1 Erosion of natural deposits

Radium – 228* No 5 PCi/L -0.0697 1 Erosion of natural deposits

* - Radium 226 and 228 is sampled by taking 1 gram sample per calendar quarter and analyzing the composite of those samples. The state considers 50 pci/L to be the level of concern for beta particles.

Disinfection Byproducts	Violations?	MCL	MCLG	Range	Highest Annual Average	Likely Source of Contamination
Total Trihalomethanes (TTHMs-Chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	80 ug/l	N/a	30ug/l-77ug/l	44.69 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic material.
HAA5-(Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid, Trichloroacetic acid)	No	60 ug/l	N/a	15 ug/l-53ug/l	31ug/l	By-product of drinking water chlorination.

- Key:**
AL = Action Level — The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.
MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close as possible to the MCLGs as feasible.
MCLG = Maximum Contaminant Level Goal - 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.
MRDL = Maximum Residual Disinfectant Level - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that additional of a disinfectant is necessary for control of microbial contaminants.
MRDLG = Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
ND = Not detected - absent or present at less than testing method detection level. All testing methods are EPA approved with detection limits much less than the MCL.
NEG = Negative results
NS = No standard
NTU = turbidity unit of measurement (Nephelometric Turbidity Units).
TT = Treatment Technique — a required process intended to reduce the level of a contaminant in drinking water.
Mg/L = Milligram per liter — corresponds to one part of liquid in one million parts of liquid (parts per million — ppm).
Pci/L = Picocuries per liter — a measure of the radioactivity in water.
Ug/L = Micrograms per liter — corresponds to one part of liquid in one billion parts of liquid (parts per billion — ppb).